

GenCore version 5.1.3  
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OM protein - nucleic search, using frame\_plus\_p2n model

Run on: January 12, 2003, 10:11:31; Search time 52 Seconds

(without alignments)  
1710.313 Million cell updates/sec

Title: US-09-649-108-1

Perfect score: 1511

Sequence: 1 MRIFAVFIEMTYWHLNAFT.....KCGIQDTNSKKQSDTHLEET 230

Scoring table:

BLOSUM62  
Xgapop 10.0, Xgapext 0.5  
Ygapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Delop 6.0, Delext 7.0

ached: 44362 seqs, 15338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODEL=frame+ p2n.model -DEV=xlh  
-O/cgn2.1/USPTO.spool/US09649108/runat\_12012003\_101121\_13898/app\_query.fasta.1.455  
-DB=Issued\_Patents\_NA -QFMT=fastap -SUFFIX=ini -MINMATCH=0.1 -LOOPCL=0  
-LIST=45 -DOCALLIGN=200 -THR\_SCORE=pcpt -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=ptc -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000  
-USER=US09649108.GCNCN.1.1.25.Grunat.12012003.101121.13898 -NCPU=6 -ICPT=3  
-NO\_XLPHY -NO\_MMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOG -DEV\_TIMEOUT=120  
-NARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-XGAPOP=10 -XGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

1: Issued\_Patents\_NA.\*  
2: /cgn2.6/prodata/2/ina/5A\_COMB.seq.\*  
3: /cgn2.6/prodata/2/ina/5B\_COMB.seq.\*  
4: /cgn2.6/prodata/2/ina/6A\_COMB.seq.\*  
5: /cgn2.6/prodata/2/ina/6B\_COMB.seq.\*  
6: /cgn2.6/prodata/2/ina/BACKFILES1.seq.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	311	20.6	1602	4	US-09-651-200-11
2	311	20.6	2229	4	US-09-651-200-5
3	307	20.3	1020	4	US-09-651-200-7
4	307	20.3	1333	4	US-09-651-200-9
5	307	20.3	2691	4	US-09-651-200-1
6	307	20.3	2885	4	US-09-651-200-3
7	191	12.6	2627	4	US-09-404-879A-391
8	176.5	11.7	1491	2	US-08-147-772-1
9	176.5	11.7	1491	2	US-08-456-104-5
10	176.5	11.7	1491	2	US-08-101-624-22
11	176.5	11.7	1491	2	US-08-751-767A-5
12	176.5	11.7	1491	3	US-08-153-262-1

13	176.5	11.7	1491	3	US-08-479-744A-28	Sequence 28, App1
14	176.5	11.7	1491	3	US-08-280-757B-28	Sequence 28, App1
15	176.5	11.7	1491	3	US-09-159-135-1	Sequence 1, App1
16	176.5	11.7	1491	4	US-08-205-697A-18	Sequence 18, App1
17	176.5	11.7	1491	4	US-08-702-525-18	Sequence 18, App1
18	176.5	11.7	1491	4	US-09-450-798-1	Sequence 1, App1
19	176.5	11.7	1491	4	US-09-326-186B-225	Sequence 225, App
20	176.5	11.7	1491	4	US-08-403-253A-1	Sequence 1, App1
21	176.5	11.7	1491	5	PCT-US95-02576-18	Sequence 18, App1
22	172	11.4	867	2	US-08-184-009-207	Sequence 207, App
23	172	11.4	867	2	US-08-458-356-207	Sequence 207, App
24	172	11.4	867	4	US-08-812-946A-2	Sequence 2, App1
25	172	11.4	867	4	US-08-460-746-207	Sequence 207, App
26	172	11.4	879	4	US-09-039-982A-31	Sequence 31, App1
27	172	11.4	879	4	US-09-039-641-31	Sequence 31, App1
28	172	11.4	879	4	US-09-039-762A-31	Sequence 31, App1
29	172	11.4	879	4	US-09-042-492D-31	Sequence 31, App1
30	169.5	11.2	879	4	US-08-913-612A-31	Sequence 31, App1
31	169.5	11.2	921	2	US-08-184-009-202	Sequence 202, App
32	169.5	11.2	921	2	US-08-458-356-202	Sequence 202, App
33	169.5	11.2	921	4	US-08-460-736-202	Sequence 202, App
34	169.5	11.2	1716	2	US-08-147-772-3	Sequence 3, App1
35	169.5	11.2	1716	2	US-08-456-104-7	Sequence 3, App1
36	169.5	11.2	1716	2	US-08-101-624-24	Sequence 24, App1
37	169.5	11.2	1716	3	US-08-153-262-3	Sequence 3, App1
38	169.5	11.2	1716	3	US-08-479-744A-30	Sequence 30, App1
39	169.5	11.2	1716	3	US-08-280-757B-30	Sequence 30, App1
40	169.5	11.2	1716	3	US-09-159-135-3	Sequence 3, App1
41	169.5	11.2	1716	4	US-08-205-697A-16	Sequence 16, App1
42	169.5	11.2	1716	4	US-08-702-525-16	Sequence 16, App1
43	169.5	11.2	1716	4	US-09-450-798-3	Sequence 3, App1
44	169.5	11.2	1716	5	PCT-US95-02576-16	Sequence 16, App1
45	169.5	11.2	1888	4	US-08-205-697A-1	Sequence 1, App1

#### ALIGNMENTS

RESULT 1  
US-09-651-200-11  
Sequence 11, Application US/09651200  
Patent No. 6429303  
GENERAL INFORMATION:  
APPLICANT: Green et al  
TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B  
TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and  
FILE REFERENCE: 15966-562 (CfRA-62)  
CURRENT APPLICATION NUMBER: US/09/651,200  
CURRENT FILING DATE: 2000-08-30  
PRIOR APPLICATION NUMBER: 60/152383  
PRIOR FILING DATE: 1999-09-03  
PRIOR APPLICATION NUMBER: 60/172909  
PRIOR FILING DATE: 1999-12-21  
PRIOR APPLICATION NUMBER: 60/183578  
PRIOR FILING DATE: 2000-02-18  
NUMBER OF SEQ ID NOS: 25  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 11  
LENGTH: 1602  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-651-200-11  
Alignment Scores:  
Pred. No.: 4,76e-30  
Score: 311.00  
Percent Similarity: 48.03%  
Best Local Similarity: 30.11%  
Query Match: 20.58%  
DB: 4  
Gaps: 5  
US-09-649-108-1 (1-290) x US-09-651-200-11 (1-1602)



GenCore version 5.1.3  
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OM protein - protein search, using sw model

Run on: January 12, 2003, 10:10:41 : Search time 14.4076 Seconds  
(without alignments)  
533.008 Million cell updates/sec

Title: US-09-649-108-1\_COPY\_30\_290

Perfect score: 1356

Sequence: 1 VEYGSNMTIECKFPVEKOLD.....KCGIDPTNSKQSDPTLLEET 261

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Listing first 45 summaries

Database : Issued Patents.AA:\*  
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2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/PCRTUS.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/Backfile1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	292	21.5	534	US-09-651-200-6	Sequence 6, Appl1
2	292	21.5	534	US-09-651-200-24	Sequence 24, Appl1
3	288	21.2	340	US-09-651-200-2	Sequence 2, Appl1
4	288	21.2	441	US-09-651-200-4	Sequence 4, Appl1
5	187.5	13.8	282	US-09-404-879A-393	Sequence 393, App
6	187.5	13.8	309	US-09-404-879A-392	Sequence 392, App
7	181	13.3	329	US-09-651-200-19	Sequence 19, Appl1
8	177.5	13.1	306	US-08-147-772-4	Sequence 4, Appl1
9	177.5	13.1	306	US-08-456-104-8	Sequence 8, Appl1
10	177.5	13.1	306	US-08-101-624-25	Sequence 25, Appl1
11	177.5	13.1	306	US-08-153-262-4	Sequence 4, Appl1
12	177.5	13.1	306	US-08-479-744A-31	Sequence 31, Appl1
13	177.5	13.1	306	US-08-280-757B-31	Sequence 31, Appl1
14	177.5	13.1	306	US-09-159-135-4	Sequence 4, Appl1
15	177.5	13.1	306	US-09-450-798-4	Sequence 4, Appl1
16	170	12.5	288	US-09-651-200-14	Sequence 14, Appl1
17	169.5	12.5	306	US-08-205-697A-17	Sequence 17, Appl1
18	169.5	12.5	306	US-08-702-525-17	Sequence 17, Appl1
19	169.5	12.5	306	US-09-651-200-17	Sequence 17, Appl1
20	169.5	12.5	306	US-09-651-200-17	Sequence 17, Appl1
21	169.5	12.5	320	US-08-205-697A-2	Sequence 2, Appl1
22	169.5	12.5	320	US-08-205-697A-2	Sequence 2, Appl1
23	169.5	12.5	320	US-08-205-697A-2	Sequence 2, Appl1
24	167	12.3	288	US-08-147-772-2	Sequence 2, Appl1
25	167	12.3	288	US-08-147-772-2	Sequence 2, Appl1
26	167	12.3	288	US-08-456-104-6	Sequence 6, Appl1
27	167	12.3	288	US-08-101-624-23	Sequence 23, Appl1

28	167	12.3	288	3	US-08-153-262-2	Sequence 2, Appl1
29	167	12.3	288	4	US-08-479-744A-29	Sequence 29, Appl1
30	167	12.3	288	4	US-08-280-757B-29	Sequence 29, Appl1
31	167	12.3	288	4	US-09-159-135-2	Sequence 2, Appl1
32	167	12.3	288	4	US-08-205-697A-19	Sequence 19, Appl1
33	167	12.3	288	4	US-08-702-525-19	Sequence 19, Appl1
34	167	12.3	288	4	US-09-450-798-2	Sequence 2, Appl1
35	167	12.3	288	4	US-08-403-253A-2	Sequence 2, Appl1
36	167	12.3	288	4	US-09-651-200-13	Sequence 13, Appl1
37	167	12.3	288	5	US-09-651-200-19	Sequence 19, Appl1
38	161	11.9	323	5	US-09-651-200-21	Sequence 21, Appl1
39	161	11.9	323	5	US-09-651-200-21	Sequence 21, Appl1
40	161	11.9	329	2	US-08-456-104-2	Sequence 2, Appl1
41	161	11.9	329	2	US-08-101-624-2	Sequence 2, Appl1
42	161	11.9	329	3	US-08-479-744A-2	Sequence 2, Appl1
43	161	11.9	329	4	US-08-280-757B-2	Sequence 2, Appl1
44	161	11.9	329	4	US-08-205-697A-23	Sequence 23, Appl1
45	161	11.9	329	4	US-08-702-525-23	Sequence 23, Appl1

## ALIGNMENTS

RESULT 1  
US-09-651-200-6

Sequence 6, Application US/09651200

Patent No. 6429303

GENERAL INFORMATION:

APPLICANT: Green et al

TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B

TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and

FILE REFERENCE: 15966-562 (CURA-62)

CURRENT APPLICATION NUMBER: US/09/651,200

CURRENT FILING DATE: 2000-08-30

PRIOR APPLICATION NUMBER: 60/152383

PRIOR FILING DATE: 1999-09-03

PRIOR APPLICATION NUMBER: 60/172909

PRIOR FILING DATE: 1999-12-21

PRIOR APPLICATION NUMBER: 60/183578

PRIOR FILING DATE: 2000-02-18

NUMBER OF SEQ ID NOS: 25

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 6

LENGTH: 534

TYPE: PRT

ORGANISM: Homo sapiens

US-09-651-200-6

Query Match

Best local similarity 29.5%; Pred. No. 1.7e-22;

Matches 78; Conservative 49; Mismatches 123; Indels 14; Gaps 5;

QY	4	GSNMTIECKFPVEKOLDLALTYWEMEDKNIQFVGEEDLKVQSHSQRARLLKDL	63	
DB	261	GTDATLCSFSPBPGSLAOLNLTWLTDRK--OLVHSFTEGRGGSAYANRRALFEDLT	318	
QY	64	SLGNALQITVDKLODAGVRCMISYGADYKRTIVVNAIPYK-----INRIILVDP	117	
DB	319	AGNANSLRLQAVRVADGSGTFCVSTINDPGSAVSLQVAPYKSPMTLEPNMDLRGDT	378	
QY	118	VTESEHEITQCA-BGYKAEVYIMTSSDHQVLSGKTTTNSKREKLEFVNTSLRINTTNE	176	
DB	379	VT-----ITCSYSGYDEAEVFMODGQGVPLTGNTTSQMANEGDLFDVHSLRVLCAG	434	
QY	177	IFCTPRRDPENHRAELVYIPELPLAHPNERTHLVYIGAILLCGLVALTFPRLRKGR	236	
DB	435	TYSCLVNPPVLDQDAHGSVITIGQPMTEPPDALMTVTVGLSLALVALAFVCMWRKIQ	494	
QY	237	MDVKKGIDPTNSKRO-SDTHLE	259	
DB	495	SCEENAGAPDODGEGSGTKALQ	518	

```
RESULT 2
US-09-651-200-24
; Sequence 24, Application US/09651200
; Patent No. 6429303
; GENERAL INFORMATION:
; APPLICANT: Green et al
; TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B
; TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and
; FILE REFERENCE: 15966-562 (CURA-62)
; CURRENT APPLICATION NUMBER: US/09/651.200
; CURRENT FILING DATE: 2000-08-30
; PRIOR APPLICATION NUMBER: 60/152383
; PRIOR FILING DATE: 1999-09-03
; PRIOR APPLICATION NUMBER: 60/172909
; PRIOR FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: 60/183578
; PRIOR FILING DATE: 2000-02-18
; MEMBER OF SEQ ID NOS: 25
; FTWARE: Patentin Ver. 2.0
; SEQ ID NO 24
; LENGTH: 534
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Sequence
; OTHER INFORMATION: m25020.protein from Figure 4.
US-09-651-200-24
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Query Match 21.5%; Score 292; DB 4; Length 534;
Best Local Similarity 29.5%; Pred. No. 1.7e-22;
Matches 78; Conservative 49; Mismatches 123; Indels 14; Gaps 5;
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```
QY 4 GSNMTIECKFPPEKOLDLAALIVYEMEDKNIQFVHGEEDLKQVHSSYRQARLLKQDL 63
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 261 GIDATLHCSFSPGFSSTQNLIMQLTDTK--QLVHSTFEGRDGSAVANFTALFPDIL 318
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 64 SGNALQITDVKLODAGVRCMISYGADYKRITVKNVAPYK-----INQRLIVDP 117
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 319 AOGNASLRLQRRVADDEGFTCFVSIIRPGSAVAISLQVAAPYSKSMTEPKKDLRPGDT 378
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 118 VTSEHETLCOA-EGYPKAEVITSSDHOVLSGKTTTNSKREKLEFNTSTLRINTTNE 176
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 379 VT---ITCSSYRGYPKAEVEFWQDQGVPLTGNTTSSQANQGLFEDVSVLRVVLGANG 434
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 177 IFYCFRRLDEPENTHAEVLPELPLAHPNERTHLVILGAILLCLGVALTIFRLKGR 236
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 435 TYSCLVARNPVLQODAHGSVTTIGQPMTEPPEALMWTVGLSLIALVALAFVCMRKIKQ 494
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 237 MMDVKKCGIQDPTNSKKQ--SDTHLE 259
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 495 SCEENAGAEEDDGEESKITALQ 518
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 3
US-09-651-200-2
; Sequence 2, Application US/09651200
; Patent No. 6429303
; GENERAL INFORMATION:
; APPLICANT: Green et al
; TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B
; TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and
; FILE REFERENCE: 15966-562 (CURA-62)
; CURRENT APPLICATION NUMBER: US/09/651.200
; CURRENT FILING DATE: 2000-08-30
; PRIOR APPLICATION NUMBER: 60/152383
; PRIOR FILING DATE: 1999-09-03
; PRIOR APPLICATION NUMBER: 60/172909
; PRIOR FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: 60/183578
; PRIOR FILING DATE: 2000-02-18
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```
; NUMBER OF SEQ ID NOS: 25
; FTWARE: Patentin Ver. 2.0
; SEQ ID NO 2
; LENGTH: 340
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-651-200-2
```

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Query Match 21.2%; Score 288; DB 4; Length 340;
Best Local Similarity 29.2%; Pred. No. 2.3e-22;
Matches 77; Conservative 49; Mismatches 124; Indels 14; Gaps 5;
```

```
QY 4 GSNMTIECKFPPEKOLDLAALIVYEMEDKNIQFVHGEEDLKQVHSSYRQARLLKQDL 63
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 67 GIDATLHCSFSPGFSSTQNLIMQLTDTK--QLVHSTFEGRDGSAVANFTALFPDIL 124
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 64 SGNALQITDVKLODAGVRCMISYGADYKRITVKNVAPYK-----INQRLIVDP 117
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 125 AOGNASLRLQRRVADDEGFTCFVSIIRPGSAVAISLQVAAPYSKSMTEPKKDLRPGDT 184
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 118 VTSEHETLCOA-EGYPKAEVITSSDHOVLSGKTTTNSKREKLEFNTSTLRINTTNE 176
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 185 VT---ITCSSYRGYPKAEVEFWQDQGVPLTGNTTSSQANQGLFEDVSVLRVVLGANG 240
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 177 IFYCFRRLDEPENTHAEVLPELPLAHPNERTHLVILGAILLCLGVALTIFRLKGR 236
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 241 TYSCLVARNPVLQODAHGSVTTIGQPMTEPPEALMWTVGLSLIALVALAFVCMRKIKQ 300
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 237 MMDVKKCGIQDPTNSKKQ--SDTHLE 259
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 301 SCEENAGAEEDDGEESKITALQ 324
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
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## RESULT 4

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US-09-651-200-4
; Sequence 4, Application US/09651200
; Patent No. 6429303
; GENERAL INFORMATION:
; APPLICANT: Green et al
; TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B
; TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and
; FILE REFERENCE: 15966-562 (CURA-62)
; CURRENT APPLICATION NUMBER: US/09/651.200
; CURRENT FILING DATE: 2000-08-30
; PRIOR APPLICATION NUMBER: 60/152383
; PRIOR FILING DATE: 1999-09-03
; PRIOR APPLICATION NUMBER: 60/172909
; PRIOR FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: 60/183578
; PRIOR FILING DATE: 2000-02-18
; NUMBER OF SEQ ID NOS: 25
; FTWARE: Patentin Ver. 2.0
; SEQ ID NO 4
; LENGTH: 441
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-651-200-4
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Query Match 21.2%; Score 288; DB 4; Length 441;
Best Local Similarity 29.2%; Pred. No. 3.3e-22;
Matches 77; Conservative 49; Mismatches 124; Indels 14; Gaps 5;
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QY 4 GSNMTIECKFPPEKOLDLAALIVYEMEDKNIQFVHGEEDLKQVHSSYRQARLLKQDL 63
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 168 GIDATLHCSFSPGFSSTQNLIMQLTDTK--QLVHSTFEGRDGSAVANFTALFPDIL 225
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 64 SGNALQITDVKLODAGVRCMISYGADYKRITVKNVAPYK-----INQRLIVDP 117
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 226 AOGNASLRLQRRVADDEGFTCFVSIIRPGSAVAISLQVAAPYSKSMTEPKKDLRPGDT 285
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 118 VTSEHETLCOA-EGYPKAEVITSSDHOVLSGKTTTNSKREKLEFNTSTLRINTTNE 176
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```

GenCore version 5.1.3  
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OM protein - protein search, using sw model

Run on: January 12, 2003, 10:10:41 ; Search time 11.5924 Seconds  
(Without alignments)  
533.008 Million cell updates/sec

Title: US-09-649-108-10

Perfect score: 1096

Sequence: 1 VEGSNMTECKFVEKQOLD.....HTAELVPELPLAHPNERT 210

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

1 number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database : Issued\_Patents\_AA:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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1	265.5	24.2	534	4	US-09-651-200-6
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4	261.5	23.9	441	4	US-09-651-200-4
5	179	16.3	282	4	US-09-404-879A-393
6	179	16.3	309	4	US-09-404-879A-392
7	164	15.0	288	4	US-09-651-200-14
8	159	14.5	306	2	US-08-147-772-4
9	159	14.5	306	2	US-08-456-104-8
10	159	14.5	306	2	US-08-101-624-25
11	159	14.5	306	3	US-08-153-262-4
12	159	14.5	306	3	US-08-479-744A-31
13	159	14.5	306	4	US-08-280-757B-31
14	159	14.5	306	4	US-09-159-135-4
15	159	14.5	306	4	US-09-450-798-4
16	155	14.1	288	2	US-08-147-772-2
17	155	14.1	288	2	US-08-456-104-6
18	155	14.1	288	2	US-08-101-624-23
19	155	14.1	288	2	US-08-751-767A-6
20	155	14.1	288	3	US-08-153-262-2
21	155	14.1	288	3	US-08-479-744A-29
22	155	14.1	288	4	US-08-280-757B-29
23	155	14.1	288	4	US-09-159-135-2
24	155	14.1	288	4	US-08-205-697A-19
25	155	14.1	288	4	US-08-702-525-19
26	155	14.1	288	4	US-09-450-798-2
27	155	14.1	288	4	US-08-403-253A-27

28	155	14.1	288	4	US-09-651-200-13	Sequence 13, Appl
29	155	14.1	288	5	PCT-US95-02576-19	Sequence 19, Appl
30	154.5	14.1	329	4	US-09-651-200-19	Sequence 19, Appl
31	153.5	14.0	208	3	US-08-630-172-15	Sequence 15, Appl
32	153.5	14.0	208	4	US-09-375-419-15	Sequence 15, Appl
33	151.5	13.8	208	4	US-09-460-384-36	Sequence 36, Appl
34	151.5	13.8	473	4	US-09-171-945-131	Sequence 131, App
35	151	13.8	306	4	US-08-205-697A-17	Sequence 17, Appl
36	151	13.8	306	4	US-08-702-525-17	Sequence 17, Appl
37	151	13.8	306	4	US-09-651-200-17	Sequence 17, Appl
38	151	13.8	306	5	PCT-US95-02576-17	Sequence 17, Appl
39	151	13.8	320	4	US-08-205-697A-2	Sequence 2, Appl
40	151	13.8	320	4	US-08-702-525-2	Sequence 2, Appl
41	151	13.8	320	5	PCT-US95-02576-2	Sequence 2, Appl
42	151	13.8	329	4	US-09-651-200-18	Sequence 18, Appl
43	149	13.6	289	4	US-09-651-200-15	Sequence 15, Appl
44	144.5	13.2	589	2	US-08-724-394A-1	Sequence 1, Appl
45	140.5	12.8	292	4	US-09-651-200-16	Sequence 16, Appl

## ALIGNMENTS

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US-09-651-200-6
; Sequence 6, Application US/09651200
; Patent No. 6429303
; GENERAL INFORMATION:
; APPLICANT: Green et al
; TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B
; TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and
; TITLE OF INVENTION: Polypeptides Encoded Thereby
; FILE REFERENCE: 15966-562 (CORA-62)
; CURRENT APPLICATION NUMBER: US/09/651,200
; PRIOR FILING DATE: 2000-08-30
; PRIOR APPLICATION NUMBER: 60/152383
; PRIOR FILING DATE: 1999-09-03
; PRIOR APPLICATION NUMBER: 60/172909
; PRIOR FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: 60/183578
; PRIOR FILING DATE: 2000-02-18
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 6
; LENGTH: 534
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-651-200-6

Query Match      24.2%  Score 265.5;  DB 4;  Length 534;
Best Local Similarity 31.0%;  Pred. No. 4.5e-20;
Matches 65;  Conservative 38;  Mismatches 94;  Indels 13;  Gaps 4;

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DB      319 ACGNARSRLRQVRYADSGSTCFVSIINDPGSAVSLQVAPYSPMTLEPNKRLRGCDT 378
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
QY      118 VTSEHELTQCA--EGYKAEVYWTSSDHQVLSGKTTTNSKREKLVNVTSLRINTTNE 176
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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US-09-651-200-24
; Sequence 24, Application US/09651200
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GenCore version 5.1.3  
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Run on: January 12, 2003, 11:11:11 : Search time 62 Seconds  
(without alignments)  
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Title: US-09-649-108-1

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Sched: 389086 segs, 220051671 residues

Total number of hits satisfying chosen parameters: 778172

Minimum DB seq length: 0  
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Post-processing: Minimum Match 08  
Maximum Match 1008  
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

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2	1511	100.0	1553	12	US-10-002-775-3
3	1511	100.0	1604	10	US-09-875-338-1
4	1511	100.0	3575	10	US-09-796-858-41

Sequence	Score	Query Match	Length	ID	Description
Sequence 3, Appl1	1511	100.0	873	10	US-09-875-338-3
Sequence 1, Appl1	1511	100.0	1553	12	US-10-002-775-1
Sequence 4, Appl1	1511	100.0	1604	10	US-09-875-338-4
Sequence 10, Appl1	1511	100.0	3575	10	US-10-002-775-10
Sequence 43, Appl1	1511	100.0	873	10	US-09-796-858-43
Sequence 10728, A	1511	100.0	497	10	US-09-867-701-2957
Sequence 2957, Ap	1511	100.0	442	10	US-09-867-701-3638
Sequence 3638, Ap	1511	100.0	666	10	US-09-875-338-18
Sequence 18, Appl	1511	100.0	819	9	US-09-896-913A-1
Sequence 3, Appl1	1511	100.0	819	10	US-09-794-210-1
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Sequence 20, Appl	1511	100.0	819	10	US-09-895-837-3
Sequence 3, Appl1	1511	100.0	842	10	US-09-875-338-20
Sequence 20, Appl	1511	100.0	1209	10	US-09-955-866-1
Sequence 1, Appl1	1511	100.0	1223	9	US-09-896-913A-1
Sequence 1, Appl1	1511	100.0	1223	10	US-09-895-837-1
Sequence 1, Appl1	1511	100.0	2229	10	US-09-910-174A-1
Sequence 14, Appl	1511	100.0	2435	10	US-09-875-338-14
Sequence 16, Appl	1511	100.0	1356	10	US-09-875-338-16
Sequence 4, Appl1	1511	100.0	1655	9	US-09-896-913A-4
Sequence 3, Appl1	1511	100.0	1655	10	US-09-794-210-3
Sequence 6, Appl1	1511	100.0	1655	10	US-09-895-837-4
Sequence 4, Appl1	1511	100.0	741	9	US-09-896-913A-6
Sequence 5, Appl1	1511	100.0	741	10	US-09-895-837-5
Sequence 30, Appl	1511	100.0	744	10	US-09-910-174A-30
Sequence 10, Appl	1511	100.0	951	10	US-09-875-338-10
Sequence 12, Appl	1511	100.0	951	10	US-09-875-338-12
Sequence 23, Appl	1511	100.0	951	10	US-09-910-174A-23
Sequence 2, Appl1	1511	100.0	1517	9	US-09-790-622-2
Sequence 63, Appl	1511	100.0	1517	10	US-09-789-561-63
Sequence 136, App	1511	100.0	1517	9	US-09-978-295A-136
Sequence 136, App	1511	100.0	1998	9	US-09-978-295A-136
Sequence 136, App	1511	100.0	1998	9	US-09-978-192A-136
Sequence 136, App	1511	100.0	1998	9	US-09-999-832A-136
Sequence 136, App	1511	100.0	1998	9	US-09-978-189A-136
Sequence 53, Appl	1511	100.0	1998	12	US-10-052-586-53
Sequence 6, Appl1	1511	100.0	3197	10	US-09-875-338-6
Sequence 19, Appl	1511	100.0	3197	10	US-09-875-338-19
Sequence 2, Appl1	1511	100.0	951	9	US-09-915-789A-2

## ALIGNMENTS

RESULT 1  
US-09-910-174A-22  
Sequence 22, Application US/09910174A  
Patent No. US20020106730A1  
GENERAL INFORMATION:  
APPLICANT: Coyle, Anthony J.  
APPLICANT: Fraser, Christopher C.  
APPLICANT: Manning, Stephen  
TITLE OF INVENTION: B7-H2 molecules, No. US20020106730A1 Members of the B7  
FILE REFERENCE: 35800/236924  
CURRENT APPLICATION NUMBER: US/09/910,174A  
PRIOR FILING DATE: 2001-07-20  
PRIOR APPLICATION NUMBER: US 09/620,461  
NUMBER OF SEQ ID NOS: 32  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO: 22  
LENGTH: 873  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-910-174A-22

Alignment Scores:  
Pred. No.: 5.33e-175  
Score: 1511.00  
Percent Similarity: 100.008  
Best Local Similarity: 100.008  
Length: 873  
Matches: 290  
Conservative: 0  
Mismatch: 0

Query Match: 100.00% Indels: 0  
DB: 10 Gaps: 0  
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DB 1 ATGAGGATATTGCTCTCTTATATTCATGACTGAGCATTTGCTGAACGCAATTACT 60  
QY 21 ValThrValProLysAspLeuTyrValAlaGluTyrGlySerAsnMetThrIleGluCys 40  
DB 61 GTCACGGTTCACAGAGCCTATATGTGTAGAGATGTGATGATGATGATGATGATGATG 120  
QY 41 LysPheProValGluLysGlnLeuAspLeuAlaAlaLeuIleValTyrTrpGluMetGlu 60  
DB 121 AATATCCAGTAGAAAAACAATTAGACCTGCTGCACTAATGTCATGTCGGAATGAG 180  
QY 61 AspLysAsnIleIleGlnPheValHisGlyGlnAspLeuLysValGlnHisSerSer 80  
DB 181 GATAGAGAACTTATTCATATTGTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 240  
QY 81 TyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlnAsnAlaAlaLeuGln 100  
DB 241 TACAGACAGAGGCGCGGCTGTGAAGAGACCACTCTCCCTGGGAATGCTGCACCTTAC 300  
QY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGlyGly 120  
DB 301 ATCCAGATGTGAAATGTCAGGATGAGAGGCTGACCGCTGATGATGATGATGATGATG 360  
QY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140  
DB 361 GCGGACTACAGGCAATTAATGTAAGTCAATGCCCAATCAACAAACAAACAAACAAAGA 420  
QY 141 IleLeuValValAspProValThrSerGluHisGluLeuThrCysGlnAlaGluTyr 160  
DB 421 ATTTGGTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 480  
QY 161 ProLysAlaGluValIleTyrPheSerSerAspHisGlnValLeuSerGlyLysThrThr 180  
DB 481 CCCAAGCGCGAATGCTATGTCAGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 540  
QY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuAlaGln 200  
DB 541 ACCACCAATTCACAG 600  
QY 201 ThrThrAsnGluIlePheTyrCysThrPheArgArgLeuAspProGluGlnAsnHis 220  
DB 601 ACACACACTATATGATTTTCTACTGACACTTTTATGAGATTTAGATCTGAGAGAAACAT 660  
QY 221 ThrAlaGluLeuValIleProGluLeuProLeuAlaHisProProAsnGluArgThrHis 240  
DB 661 ACAGCTGAATTTGTCATCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 720  
QY 241 LeuValIleLeuGlnValIleLeuLeuCysLeuGlyValAlaLeuThrPheIlePheArg 260  
DB 721 TTGGTATTTCTGGAGCCCACTTATATGCTTGTGTACACTGACATTCATCTTCCGT 780  
QY 261 LeuArgLysGlyArgMetLeuAspValLysCysGlyIleGlnAspThrAsnSerLys 280  
DB 781 TTAGAGAAAGGAG 840  
QY 281 LysGlnSerAspThrHisLeuGlnGluThr 290  
DB 841 AAGCAAGATGATACATTTGAGAGAGAGAG 870

APPLICANT: Nelly Malenkovich  
TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR  
FILE REFERENCE: GNN-004ADV  
CURRENT APPLICATION NUMBER: US/10/002,775  
CURRENT FILING DATE: 2001-11-02  
PRIOR APPLICATION NUMBER: US 09/644,934  
PRIOR FILING DATE: 2000-08-23  
PRIOR APPLICATION NUMBER: 60/150,390  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 3  
LENGTH: 1553  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (53)..(922)  
US-10-002-775-3  
Alignment Scores:  
Pred. No.: 1,27e-174 Length: 1553  
Score: 1511.00 Matches: 290  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 100.00% Indels: 0  
Gaps: 0  
US-09-649-108-1 (1-290) x US-10-002-775-3 (1-1553)  
QY 1 MetArgIlePheAlaValPheIlePheMetThrTyrTrpHisLeuAsnAlaPheThr 20  
DB 53 ATGAGGATATTGCTCTTATATTCATGACTGAGCATTTGCTGAACGCAATTACT 112  
QY 21 ValThrValProLysAspLeuTyrValAlaGluTyrGlySerAsnMetThrIleGluCys 40  
DB 113 GTCACGGTTCACAGAGCCTATATGTGTAGAGATGTGATGATGATGATGATGATGATG 172  
QY 41 LysPheProValGluLysGlnLeuAspLeuAlaAlaLeuIleValTyrTrpGluMetGlu 60  
DB 173 AATATCCAGTAGAAAAACAATTAGACCTGCTGCTCACTAATGTCATTTGGGAATGAG 232  
QY 61 AspLysAsnIleIleGlnPheValHisGlyGlnAspLeuLysValGlnHisSerSer 80  
DB 233 GATAGAGAACTTATTCATTTGTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 292  
QY 81 TyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlnAsnAlaAlaLeuGln 100  
DB 293 TACAGACAGAGGCGCGGCTGTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 352  
QY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGlyGly 120  
DB 353 ATCAGAGATGTGAATGTCAGAGATGAGAGGCTGACCGCTGCATGATCAGCTATGTGCT 412  
QY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140  
DB 413 GCGGACTACAGGCAATTAATGTAAGTCAATGCCCAATCAACAAATCAACCAAGA 472  
QY 141 IleLeuValValAspProValThrSerGluHisGluLeuThrCysGlnAlaGluTyr 160  
DB 473 ATTTGGTTGTGATCCAGTCACCTCTGAAACATGAACTGCAATCTGAGGAGGCTAC 532  
QY 161 ProLysAlaGluValIleTyrPheSerSerAspHisGlnValLeuSerGlyLysThrThr 180  
DB 533 CCCAAGCGCGAATGCTATGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 592  
QY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuArgIleAsn 200  
DB 593 ACCACCAATTCACAG 652  
QY 201 ThrThrAsnGluIlePheTyrCysThrPheArgArgLeuAspProGluGlnAsnHis 220  
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; PRIOR FILING DATE: 1999-12-29
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; PRIOR FILING DATE: 2000-05-14
; PRIOR APPLICATION NUMBER: 09/597,993
; PRIOR FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/599,596
; PRIOR FILING DATE: 2000-06-22
; PRIOR APPLICATION NUMBER: 09/606,565
; PRIOR FILING DATE: 2000-06-29
; PRIOR APPLICATION NUMBER: 09/365,164
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/630,334
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; PRIOR FILING DATE: 2000-09-20
; NUMBER OF SEQ ID NOS: 50
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Query Match: 100.00% Indels: 0
DB: 10 Gaps: 0

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OY 41 LysPheProValGluLysGlnLeuAspLeuAlaAlaLeuIleValTyrTrpGluMetGlu 60
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OY 61 AspLysAsnIleIleGlnPheValHisGlyGluGluAspLeuValGlnHisSerSer 80
DB 239 GATTAAGAACTATTATTAATTTGTGCAATGGAGAGCAAGCACTGAAGGTTCCAGCATATGAC 298
OY 81 TyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlnAsnAlaAlaLeuGln 100
DB 299 TACAGACAGAGGCGCGCTGTGAAGACACACTCTCCCTGGGAATGCTGCACATTGAC 358
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DB 419 GCGGACTACAGCGAATTAAGTGAAGTCAATGCCCCCAATCAACAAACCAACCAAGA 478
OY 141 IleLeuValValAspProValThrSerGlnHisGluLeuThrCysGlnAlaGluGlyTyr 160
DB 479 ATTTGGTGTGGATCCAGTCACTGACCTGTGAACATGMACTGCAATGTCAGGTGAGGGCTAC 538
OY 161 ProLysAlaGluValIleThrThrSerSerAspHisGlnValLeuSerGlyLysThrThr 180
DB 539 CCCAAGCGCAAGTCACTGTGACACAGACATGACCATCAATCCTGATGATGAGACCAAC 598
OY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuAlaGlyIleAsn 200
DB 599 ACCCAACAATTCCAAGAGAGAGGAGGAGGCTTTTAAATGTGACACACATGCAAAATTAAC 658
OY 201 ThrThrThrAsnGluIlePheTyrGlyThrPheArgArgLeuAspProGluGluAsnHis 220
```

```

DB 659 ACAACAATATGATGATTTTCTACTGCACTTTTGGAGATTAGTCTGTGAGAAACCAT 718
OY 221 ThrAlaGluLeuValIleProGluLeuProLeuAlaHisProProAsnGluArgThrHis 240
DB 719 ACAGCGAATGTGCTCATCCAGAACTACCTGTGGCATCTCTCCAAATGAAAGACATCAC 778
OY 241 LeuValIleLeuGlyAlaIleLeuLeuCysLeuGlyValAlaLeuThrPheIlePheArg 260
DB 779 TTGGTAATTCGTGGAGCCATCTATTATATGCGCTGTGTACACTGACATTCATCTTCGCT 838
OY 261 LeuArgLysGlyArgMetLeuAspValLysLysCysGlyIleGlnAspThrAsnSerLys 280
DB 839 TTAAAGAAAAGGAGAAATGATGATGTGAAAAATGTGGCATCCAAAGTACAACTCAAG 898
OY 281 LysGlnSerAspThrHisLeuGluGluThr 290
DB 899 AAGCAAAAGTATACACTTTTGGAGAGACG 928

RESULT 5
US-09-875-338-3
; Sequence 3, Application US/09875338
; Patent No. US20020095024A1
; GENERAL INFORMATION:
; APPLICANT: MIKESSELL, GLEN E.
; APPLICANT: CHANG, HAN
; APPLICANT: FINGER, JOSHUA N.
; APPLICANT: YANG, GUOCHEN
; APPLICANT: LU, PIN
; APPLICANT: ZHOU, XIA-DI
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
; TITLE OF INVENTION: IMMUNOMODULATION
; FILE REFERENCE: 3053-4071US2
; CURRENT APPLICATION NUMBER: US/09/875,338
; CURRENT FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/272,107
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: 60/209,811
; PRIOR FILING DATE: 2000-06-06
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3600
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-875-338-3

Alignment Scores:
Pred. No.: 4,51e-174 Length: 3600
Score: 1511.00 Matches: 290
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-875-338-3 (1-3600)
OY 1 MetarglllephalvalaPheillepmetThrTyrTrpHisleuAsnAlaPheThr 20
DB 93 ATGAGGATATTGGCTCTTTATATTCATGACCTACTGGCATTTGGCAAGCATTTACT 152
OY 21 ValThValProLysAspLeuTyrValValGluTyrGlySerAsnMetThrIleGluCys 40
DB 153 GTCACGGTCCCAAGGACCTATATGTGTAGAGTATGTCGAATATGACAAATTTGAATGC 212
OY 41 LysPheProValGluLysGlnLeuAspLeuAlaAlaLeuIleValTyrTrpGluMetGlu 60
DB 213 AAATTCCTCAAGAAAAACAATTAAGACCTGCTGCATTAATGTCTATTGGGAAATGAG 272
OY 61 AspLysAsnIleIleGlnPheValHisGlyGluGluAspLeuLysValGlnHisSerSer 80
DB 273 GATTAAGAACTATTATTAATTTGTGCAATGGAGAGGAAACCTGAAGGTTCCAGCATATGAC 332
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QY 81 TyrArglnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlyAsnAlaAlaLeuGln 100  
 Db 333 TACAGACAGAGGCGCGCTGTGAGACACAGCTCTCCCTGGGAAATGCTCCACTTACG 392  
 QY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGly 120  
 Db 393 ATCAACATGTGAATGTCAGAGATGCAGGGGTGTACCCCTCATGATCAGCATGTGGT 452  
 QY 121 AlaAspTyrLysArgGlyIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140  
 Db 453 GCCGACTACAAAGCAATTAAGTGAAGTCAATGCCCATCAACAAATCAACCAAGA 512  
 QY 141 IleLeuValValAspProValThrSerGlnHisGlnLeuThrCysGlnAlaGlyGlyTyr 160  
 Db 513 ATTTGGTGTGGATCCAGTCACTCTGAACATGACATGACATGACAGCTGAGGGCTAC 572  
 QY 161 ProLysAlaGluValIleTyrThrSerSerAspHisGlnValLeuSerGlyLysThrThr 180  
 Db 573 CCCAAGGCCGAAATCATCTGGACAAGCATGACCATCAAGTCTGAGTGAAGACACC 632  
 QY 181 ThrThrAsnSerLysArgGlnGluLysLeuPheAsnValIleThrSerThrLeuArgIleAsn 200  
 Db 633 ACCACCAATTCACAGAGAGAGAGAGCTTTTCAATGTGACACAGACACTGAGATCAAC 692  
 QY 201 ThrThrAsnGlnIlePheTyrCysThrPheArgArgLeuAspProGlnGlnAsnHis 220  
 Db 693 ACACACATATGATGATTTCTACTGCACCTTTAGGAGATTAGATCCTGAGAAACCAT 752  
 QY 221 ThrAlaGluLeuValIleProGlnLeuProLeuAlaHisProAsnGlnArgThrHis 240  
 Db 753 ACAGCAATTTGTCATCCGCAAGTCACTGTCACATCCTCCAAATGAAGAAGCTAC 812  
 QY 241 LeuValIleLeuGlyAlaIleLeuLeuCysLeuGlyValAlaLeuThrPheIlePheArg 260  
 Db 813 TTGCTAATTTGGAGGCACTTATTAATGCTGTGAGACAGTCAATCATCTTCCT 872  
 QY 261 LeuArgLysGlyArgMetLeuAspValLysCysGlyIleGlnAspThrAsnSerLys 280  
 Db 873 TTAAAGAAAGGAGCAATGATGATGTCAAAATAATGTGGCATCCAAAGATCAAACTCAAAG 932  
 QY 281 LysGlnSerAspThrHisLeuGlnGluThr 290  
 Db 933 AACCAAGTATACACATTTGGAGAGACG 962  
 RESULT 6  
 US-10-002-775-1  
 Sequence 1, Application US/10002775  
 Patent No. US20020102651A1  
 GENERAL INFORMATION:  
 APPLICANT: Gordon Freeman  
 APPLICANT: Vassiliki Bousiots  
 APPLICANT: Tatyana Chernova  
 APPLICANT: Nelly Malenkovich  
 TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR  
 FILE REFERENCE: GNN-004ADV  
 CURRENT APPLICATION NUMBER: US/10/002,775  
 CURRENT FILING DATE: 2001-11-02  
 PRIOR APPLICATION NUMBER: US 09/644,934  
 PRIOR FILING DATE: 2000-08-23  
 PRIOR APPLICATION NUMBER: 60/150,390  
 PRIOR FILING DATE: 1999-08-23  
 NUMBER OF SEQ ID NOS: 11  
 SOFTWARE: PatentIn Ver. 2.0  
 SEQ ID NO 1  
 LENGTH: 968  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: COS  
 LOCATION: (59)..(793)  
 US-10-002-775-1

## Alignment Scores:

Pred. No.: 4,69e-135 Length: 968  
 Score: 1184.00 Matches: 227  
 Percent Similarity: 100.00% Conservative: 0  
 Best Local Similarity: 100.00% Mismatches: 0  
 Query Match: 78.36% Indels: 0  
 DB: 12 Gaps: 0

US-09-649-108-1 (1-290) x US-10-002-775-1 (1-968)

QY 1 MetArgIlePheAlaValPheIlePheMetThrTyrTrpHisLeuLeuAsnAlaPheThr 20  
 Db 59 ATGAGATATTTGCTGCTTATATATTCATGACCTGACCTGATTCCTGAGCCATTACT 118  
 QY 21 ValThrValProLysAspLeuTyrValValGlyTyrGlySerAspMetThrIleGlyCys 40  
 Db 119 GTCAAGGTTCCCAAGGACCTATATGTGTAGAGTGTGTAGCAATATGCAATTAATGC 178  
 QY 41 LysPheProValGluLysGlnLeuAspLeuAlaAlaLeuIleValTyrTrpGlnMetGlu 60  
 Db 179 AAATTCACAGTAGAAAAACAATTAGACCTGGCTGCACCTAATTGTATTGGAAATGGAG 238  
 QY 61 AspLysAsnIleIleGlnPheValHisGlyGlnAspLeuLysValGlnHisSerSer 80  
 Db 239 GATAAGAACATTATTCATTTGTGCATGAGAGAGAACCTGAAGCTTCAGCATGTAGC 298  
 QY 81 TyrArglnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlyAsnAlaAlaLeuGln 100  
 Db 299 TACAGACAGAGGCGCGCTGTGAAAGCACAGCTCTCCCTGGGAAATGCTCCACTTACG 358  
 QY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGly 120  
 Db 359 ATCAAGATGTGAATTTGACAGATGCAGGGGTGTACCCCTCATGATACATGTGTGCT 418  
 QY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140  
 Db 419 GCCGACTACAAAGCAATTAAGTGAAGTCAATGCCCATCAACAAATCAACCAAGA 478  
 QY 141 IleLeuValValAspProValThrSerGlnHisGlnLeuThrCysGlnAlaGlyGlyTyr 160  
 Db 479 ATTTGGTGTGGATCCAGTCACTGTCACATGCAATGACATGACATGACAGCTGAGGCTAC 538  
 QY 161 ProLysAlaGluValIleTyrThrSerSerAspHisGlnValLeuSerGlyLysThrThr 180  
 Db 539 CCCAAGGCCGAAATCATCTGGACAAGCATCAAGTCTGAGTGAAGACCCAC 598  
 QY 181 ThrThrAsnSerLysArgGlnGluLysLeuPheAsnValIleThrSerThrLeuArgIleAsn 200  
 Db 599 ACCACCAATTCACAGAGAGAGAGAGCTTTTCAATGTGACACAGACACTGAGATCAAC 658  
 QY 201 ThrThrAsnGlnIlePheTyrCysThrPheArgArgLeuAspProGlnGlnAsnHis 220  
 Db 659 ACACACATATGATGATTTCTACTGCACCTTTAGGAGATTAGATCCTGAGAAACCAT 718  
 QY 221 ThrAlaGluLeuValIlePro 227  
 Db 719 ACAGCTGAATGTGATCCCA 739  
 RESULT 7  
 US-09-875-338-4  
 Sequence 4, Application US/09875338  
 Patent No. US20020095024A1  
 GENERAL INFORMATION:  
 APPLICANT: MIKESSEL, GLEN E.  
 APPLICANT: CHANG, HAN  
 APPLICANT: FINGER, JOSHUA N.  
 APPLICANT: YANG, GUCHEN  
 APPLICANT: LU, PIN  
 APPLICANT: ZHOU, XIA-DI  
 APPLICANT: PEACH, ROBERT  
 TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
 IMMUNOMODULATION  
 FILE REFERENCE: 3053-4071US2

```

; CURRENT APPLICATION NUMBER: US/09/875,338
; CURRENT FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/272,107
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: 60/209,811
; PRIOR FILING DATE: 2000-06-06
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 1443
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: fusion construct
US-09-875-338-4
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Alignment Scores:
Pred. No.: 1,07e-128 Length: 1443
Score: 1134.00 Matches: 217
Percent Similarity: 100.00% Conservative: 1
Best Local Similarity: 99.54% Mismatches: 0
Query Match: 75.05% Indels: 0
DB: 10 Gaps: 0
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US-09-649-108-1 (1-290) x US-09-875-338-4 (1-1443)

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OY 22 ThrValProLysAspLeuTyValValGluTyrGlySerAsnMetThrIleGluCysLys 41
DB 76 AGTGTTCCCAAGAGACCTATATGTGTRAGATATGTCATATGCAATATGCAATGCAAA 135
OY 42 PheProValGluLysGlnLeuAspLeuAlaLeuIleValTyrTrpGluMetGluAsp 61
DB 136 TTCCAGTAGAAAACAATTAGACCTGGCTGCCTAATGTCTGATTTGGAAATGGAGAT 195
OY 62 LysAsnIleIleGlnPheValHisGlyGluGluAspLeuLysValGlnHisSerSerTyr 81
DB 196 AAGAACATTATTCATTTGTCATGAGAGAGAACCTGCAAGTTCCATAGTAGCTAC 255
OY 82 ArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlnLysAlaIleGlnIle 101
DB 256 AGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 315
OY 102 ThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGlyGlyAla 121
DB 316 ACAGATGTGAATTCAGATGTCAGAGGCTGTACCGCTGCATGATGATGCTGAGTGGCC 375
OY 122 AspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArgIle 141
DB 376 GACTACAGGGAATTCCTGAAAGTCAATGCCCCATCAACAACCAACCAAGAAATT 435
OY 142 LeuValValAspProValThrSerGluHisGluLeuThrCysGlnAlaGluGlyTyrPro 161
DB 436 TTGGTTGTGATCAGTCACTGCTGACATGAACTGACATGTCAGGCTGAGGGCTACCCC 495
OY 162 LysAlaGluValIleTyrThrSerSerAspHisGlnValLeuSerGlyLysThrThr 181
DB 496 AAGCGGAGATCATCTGGACAGACGATCAACATCAAGTCTGAGTGAAGACACACACC 555
OY 182 ThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuArgIleAsnThr 201
DB 556 ACCAATTTCCAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 615
OY 202 ThrThrAsnGluLeuPheTyrCysThrPheArgArgLeuAspProGluGluAsnHisThr 221
DB 616 ACACAAATAGATTTTCTTACTGCACTTTTGAAGATTAAGTCTTGAGAAACATACA 675
OY 222 AlaGluLeuValIleProGluLeuProLeuAlaHisProProAsnGluArgThr 239
DB 676 GCTGAATGTGATCCCAAGAACTACCTCTGACATCTCCCAATGAAGAGACT 729
RESULT 8
US-10-002-775-10
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; Sequence 10, Application US/10002775
; Patent No. US20020102651A1
; GENERAL INFORMATION:
; APPLICANT: Gordon Freeman
; APPLICANT: Vassiliki Bousioliotis
; APPLICANT: Tatyana Chernova
; APPLICANT: Nelly Malenkovich
; TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR
; FILE REFERENCE: GNN-004ADV
; CURRENT APPLICATION NUMBER: US/10/002,775
; CURRENT FILING DATE: 2001-11-02
; PRIOR APPLICATION NUMBER: US 09/644,934
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 60/150,390
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 3593
; TYPE: DNA
; ORGANISM: Mus musculus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (17)..(889)
US-10-002-775-10
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Alignment Scores:

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Pred. No.: 7.42e-118 Length: 3593
Score: 1050.00 Matches: 202
Percent Similarity: 81.10% Conservative: 34
Best Local Similarity: 69.42% Mismatches: 53
Query Match: 69.49% Indels: 2
DB: 12 Gaps: 2
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US-09-649-108-1 (1-290) x US-10-002-775-10 (1-3593)

```

OY 1 MetArgIlePheAlaValPheIlePheMetThrTyrTrpHisLeuLeuAsnAlaPheThr 20
DB 17 ATGAGATATTTCTGCTGCAATATATTCACAGCCGCTGCTGCAACGGCGCTTACT 76
OY 21 ValThrAlaProLysAspLeuTyValValGluTyrGlySerAsnMetThrIleGluCys 40
DB 77 ATCAGGCTCCAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 136
OY 41 LysPheProValGluLysGlnLeuAspLeuAlaLeuIleValTyrTrpGluMetGlu 60
DB 137 AGATTCCTGTAGACAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 196
OY 61 AspLysAsnIleIleGlnPheValHisGlyGluGluAspLeuLysValGlnHisSerSer 80
DB 197 GATGAGCAAGTATTCAGTTTGTGGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 256
OY 81 TyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlnLysAlaIleGln 100
DB 257 TTCAGGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 316
OY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGlyGly 120
DB 317 ATCAGACAGCTCAAGCTGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 376
OY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140
DB 377 GCGGATACAAAGCAAGATCAGCTGAAAGTCAATGCCCATTCGCCCAATATCAACAG 436
OY 141 IleLeuValValAspProValThrSerGluHisGluLeuThrCysGlnAlaGluGlyTyr 160
DB 437 ATT--TCCGTGATTCAGGCACCTCTGACATGAACTAATATATTCAGGCGAGGTTAT 493
OY 161 ProLysAlaGluValIleTyrThrSerSerAspHisGlnValLeuSerGlyLysThrThr 180
DB 494 CCAGAGAGCTAGATATCTGAGACAAACAGTACCAACACCCGATGAGTGGAAAGAGAG 553
OY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuArgIleAsn 200
```

D  
554 GTCACCACTTCCCGGAGCAGAGGGATGCTTCTCATGTGAACACACTCTAAGGCTCAC 613

OY 201 ThrThrasncluilpheTyrcystThrPheargrLeuaspproglugluasnhis 220  
||| ||||||||| |  
GCCACAGCCAATGATGTTTCTACTACTACGTTTGAGATCACAGGCAGCAAAACAC 673

OY 221 ThrAlaGlueValIleProgluleuProleuaIahisPropoAsnguarThrHis 240  
||| ||||||||| |  
ACAGCGAGCTGTATCAACCAGAAGCTCCCAACAATCTCCACAGAACAGACTCAC 733

OY 241 LeuValIleleucAlaIleLeuleuCysleuglyValalaleuthrhphallephearg 260  
||| :||:||||| |  
TGGGTCTCTTGGGATTCATTCTGTTCTCTCAATTGATGTCACAGGTCCTCTTTC 793

OY 261 leuArgLysGLy--ArgmetelaspyallysLysCysglylleglnaspTrasnser 279  
||| ||||||||| |  
TTGAGAAAACAAGTAGAATGTAGATGTGAGAAATGTGGCCCTTAAGATACAGCTCA 853

D  
280 LysLysGlnSeraspthrHisLeuGluThr 290  
||| :||:||||| |  
854 AAAAACCGAAATGATACACAATTCGAGAGACG 886

RESULT 9  
US-09-796-858-43  
Sequence 43, Application US/09796858  
Patent No. US20020055139A1  
GENERAL INFORMATION:  
APPLICANT: Holtemann, Douglas  
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC,  
PREVENTIVE, THERAPEUTIC, AND OTHER USES  
FILE REFERENCE: 7853-226-999  
CURRENT APPLICATION NUMBER: US/09/796, 858  
PRIOR FILING DATE: 2001-03-01  
PRIOR APPLICATION NUMBER: 09/723,094  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/223,546  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/224,246  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/312,359  
PRIOR FILING DATE: 1998-05-14  
PRIOR APPLICATION NUMBER: 09/336,536  
PRIOR FILING DATE: 1999-06-18  
PRIOR APPLICATION NUMBER: 09/342,687  
PRIOR FILING DATE: 1999-06-29  
PRIOR APPLICATION NUMBER: 09/399,723  
PRIOR FILING DATE: 1999-09-20  
PRIOR APPLICATION NUMBER: 09/471,179  
PRIOR FILING DATE: 1999-12-23  
PRIOR APPLICATION NUMBER: 09/474,071  
PRIOR FILING DATE: 1999-12-29  
PRIOR APPLICATION NUMBER: 09/474,072  
PRIOR FILING DATE: 1999-12-29  
PRIOR APPLICATION NUMBER: 09/572,002  
PRIOR FILING DATE: 2000-05-14  
PRIOR APPLICATION NUMBER: 09/597,993  
PRIOR FILING DATE: 2000-06-12  
PRIOR APPLICATION NUMBER: 09/599,596  
PRIOR FILING DATE: 2000-06-22  
PRIOR APPLICATION NUMBER: 09/606,565  
PRIOR FILING DATE: 2000-06-29  
PRIOR APPLICATION NUMBER: 09/365,164  
PRIOR FILING DATE: 1999-07-30  
PRIOR APPLICATION NUMBER: 09/630,334  
PRIOR FILING DATE: 2000-07-31  
PRIOR APPLICATION NUMBER: 09/665,666  
FILING DATE: 2000-09-20  
SEQ ID NO 43  
LENGTH: 891  
TYPE: DNA  
ORGANISM: Mus musculus

;	FEATURE:	modified_base	
;	NAME/KEY:	all "n" positions	
;	LOCATION:	all "n" positions	
;	OTHER INFORMATION:	n=a, c, g, or t	
US-09-796-858-43			
Alignment Scores:			
Pred. No.:	1.38e-103	Length:	891
Score:	925.50	Matches:	191
Percent Similarity:	79.36%	Conservative:	32
Best Local Similarity:	67.97%	Mismatches:	54
Query Match:	61.25%	Indels:	7
DB:	10	Gaps:	3
US-09-649-108-1 (1-290) x US-09-796-858-43 (1-891)			
QY	1	MetargilepheaIaValaPheIlePheMethrTyrrrPhIseIueaSnalApeThr	20
DB	55	ATGAGGAAATTTCCTGGCATTATATTCACAGCCTGCTGTCATTGCTACGGCGCTTACT	114
QY	21	ValThrValProLysAspLeuTyrrValaIgluTyrgIyseraSmethrIleIgluCyS	40
DB	115	ATCAGCGCTCCAAAGGAGCTTACGTGTGTGAGTATGGACAGCAACGTACAGATGAGATGC	174
QY	41	LysPheProValaIgluLysGlnLeuAspLeuAlaIleuIleValTyrrPglumetGlu	60
DB	175	AGATTCCCTTGAGAACGGGAGCTGCAGCTGCTTACGTAGCGGTACTGGAAAGAA	234
QY	61	AspLysaSnIleIleGlnPheValHIsglyGlnLysPleuTyrrValaIgluHisSer	80
DB	235	GATGAGCAAGTATCATGTTGTGGCAGGAGAGGAGGACCTTAAGCTTCAGCACAGCAAC	294
QY	81	TyrArgGlnArgAlaArgLeuLeuLysAspGlnSerLeuGlnAsnAlaIleuGln	100
DB	295	TTCACGGGGAGACCTCGCTGCTCCAAAGGACACAGCTTTGAAGGAATATGCTGCCCTTACG	354
QY	101	IleThrAspValLysLeuGlnAspAlaGlyValTyrrArgCysMetIleSerTyrglyGly	120
DB	355	ATCACAGACGTCAAGCTGCAGAGCGAGCGCTTACGTGCATAAATACACTACGTGCTGT	414
QY	121	AlaAspTyrrLysArgIleThrValLysValaSnalAProTyrrAsnLysIleasnGlnArg	140
DB	415	GGGACATCAAGCGAGATCACCTGGAAGTCATATCCCATACGCCAAATATCACCAAGA	474
QY	141	IleIeuValLysAspProValThrSerGlnIsgluLeuTyrrCysGlnalaglulTyrr	160
DB	475	ATT---TCCGTGATCCAGCCACCTTCGTGAGCATTAACATAATATATCTAGGCCGAGGTTAT	531
QY	161	ProLysAlaGluValIleTyrrPThrSerSerAspIsglnValIleuSerGlyLysThrThr	180
DB	532	CCAGAAAGCTGAGTATCTGGACAAACAGTACCACCAACCCCGAGTGGGAAAGAGACT	591
QY	181	ThrThrAsnSerLysArgGluGlnLysLeuPheAsnValThrSerThrIleuArgIleAsn	200
DB	592	GTCACCACTCCCGAGCAGAGGAGATGCTTCATATGTAGCACACACTGTGAGAGTC-AAC	650
QY	201	ThrThr-----ThrAsnGluIlePheTyrrCysThrPheArgIleuAspProGluGlu	218
DB	651	GCCACATANNAGCAATGATGAT-TTCTACTGTACGTATTTGAGATACAGCCAGGGCAA	709
QY	219	AsnHisThrAlaGluLeuValIleProGluLeuProIleuAlaHisProProAsnGluArg	238
DB	710	AACCAACACAGGGGC-GAATATCATCCAGAAACTGGCTGCACACACTCTCCACAGAACAG	768
QY	239	ThrHisLeuValIleIeuGlyAlaIleIeuLeuCySleuGlyAlaIleuThrPheIle	258
DB	769	ACTCACTGGGTCTTCTGTGATCCATCTCTGTTCTTCATTTGATGTCACAGCGTCTC	828
QY	259	PheArgLeuArgLysGly---ArgMetMetAspValLysLysCysGlyIleGlnAspThr	277
DB	839	CTCTCTTCTGAGAAACAAGTAGATGCTAATGTGGAAATTTGGCGTTTGAAGATACA	888
QY	278	Asn 278	

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Db      889 AGC 891
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RESULT 10
US-09-867-701-10728
; Sequence 10728, Application US/09867701
; Patent No. US20020132237A1
; GENERAL INFORMATION:
; APPLICANT: Agilate, Paul A.
; APPLICANT: Jones, Robert
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.497
; CURRENT APPLICATION NUMBER: US/09/867,701
; CURRENT FILING DATE: 2001-05-29
; NUMBER OF SEQ ID NOS: 10912
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10728
; LENGTH: 464
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-867-701-10728

Alignment Scores:
Pred. No.: 1,1e-79      Length: 464
Score: 726.00      Matches: 140
Percent Similarity: 100.00%      Conservative: 0
Best Local Similarity: 100.00%      Mismatches: 0
Query Match: 48.05%      Indels: 0
DB: 10      Gaps: 0

US-09-649-108-1 (1-290) x US-09-867-701-10728 (1-464)
QY      88      LeuLysaspGlnLeuSerLeuGlyAsnAlaLeuGlnIleThrAspValLysLeuGln 107
Db      9      TTGAAGACACGAGCTCTCCCTGGAAATGCTGCACCTTCAGATCAGATGTGAAATTCGAG 68
QY      108     AspAlaGlyValTyrArgCysMetIleSerTyrGlyGlyAlaAspTyrLysArgIleThr 127
Db      69     GATGCAAGGGGTGATACCCCTGCATCATCATCATATGTTGGTCCGCTACAGCGAATTACT 128
QY      128     ValLysValAsnAlaProTyrAsnLysIleAsnGlnArgIleLeuValLysProVal 147
Db      129     GTGAAATCATGATGCCCATCAACAAATCAACCAAGAAATTTGGTTGATCCAGTC 188
QY      148     ThrSerGlnHisGluLeuThrCysGlnAlaGluGlyTyrProLysAlaGluValIleTrp 167
Db      189     ACCTCTGAACATGAACTGACATGTACAGCTGAGGCTACCCCAAGCCGAGATCATCTCG 248
QY      168     ThrSerSerAspHisGlnValLeuSerGlyLysThrThrThrAsnSerLysArgGlu 187
Db      249     ACAAGCAGTACCATCTCAAGTCTGAGTGTAGACCAACCAACCAATTCACAGAGAGAG 308
QY      188     GlnLysLeuPheAsnValThrSerThrLeuArgIleAsnThrThrAsnGluIlePhe 207
Db      309     GAGAGAGCTTTTCATGATGACACAGCAGCACTGAGATCAACAACTAATGAGATTTTC 368
QY      208     TyrCysThrPheArgArgLeuAspProGluGlnAsnHisThrAlaGluLeuValIlePro 227
Db      369     TACTGCACCTTTTGAAGATTAAGATCCTGAGGAAACCAATACAGCTGAATGTGATCCCA 428

RESULT 11
US-09-867-701-2957
; Sequence 2957, Application US/09867701
; Patent No. US20020132237A1
; GENERAL INFORMATION:
; APPLICANT: Agilate, Paul A.
; APPLICANT: Jones, Robert
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.497
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; CURRENT APPLICATION NUMBER: US/09/867,701
; CURRENT FILING DATE: 2001-05-29
; NUMBER OF SEQ ID NOS: 10912
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2957
; LENGTH: 497
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-867-701-2957

Alignment Scores:
Pred. No.: 4,69e-78      Length: 497
Score: 713.00      Matches: 140
Percent Similarity: 99.29%      Conservative: 0
Best Local Similarity: 99.29%      Mismatches: 0
Query Match: 47.19%      Indels: 1
DB: 10      Gaps: 0

US-09-649-108-1 (1-290) x US-09-867-701-2957 (1-497)
QY      88      LeuLysaspGlnLeuSerLeuGlyAsnAlaLeuGlnIleThrAspValLysLeuGln 107
Db      9      TTGAAGACACGAGCTCTCCCTGGAAATGCTGCACCTTCAGATCAGATGTGAAATTCGAG 68
QY      108     AspAla-GlyValTyrArgCysMetIleSerTyrGlyGlyAlaAspTyrLysArgIleThr 127
Db      69     GATGCAAGGGGTGATACCCCTGCATCATCATCATATGTTGGTCCGCTACAGCGAATTACT 128
QY      127     rValLysValAsnAlaProTyrAsnLysIleAsnGlnArgIleLeuValLysProVal 147
Db      129     TGTGAAGTCAATGCCCATCAACAAATCAACCAAGAAATTTGGTTGGATCCAGT 188
QY      147     LThrSerGlnHisGluLeuThrCysGlnAlaGluGlyTyrProLysAlaGluValIleTrp 167
Db      189     CACCTCTGAACATCAATGACATGTACAGCTGAGGCTTACCCCAAGCCGAGATCATCTG 248
QY      167     pThrSerSerAspHisGlnValLeuSerGlyLysThrThrThrAsnSerLysArgIle 187
Db      249     GACAGAGAGTACCATCAAGTCTGAGTGTAGACCAACCAACCAATTCACAGAGAGA 308
QY      187     uGlnLysLeuPheAsnValThrSerThrLeuArgIleAsnThrThrAsnGluIlePhe 207
Db      309     GGAGAAAGCTTTTCAATGTGACACAGCAGCATGAGATCAACCAACTAATGAGATTTT 368
QY      207     eTyrCysThrPheArgArgLeuAspProGluGlnAsnHisThrAlaGluLeuValIlePr 227
Db      369     CTACTGCACCTTTTGAAGATTAAGATCCTGAGGAAACCAATACAGCTGAATTTGATCC 428
QY      227     o 227
Db      429     A 429

RESULT 12
US-09-867-701-3638/c
; Sequence 3638, Application US/09867701
; Patent No. US20020132237A1
; GENERAL INFORMATION:
; APPLICANT: Agilate, Paul A.
; APPLICANT: Jones, Robert
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.497
; CURRENT APPLICATION NUMBER: US/09/867,701
; CURRENT FILING DATE: 2001-05-29
; NUMBER OF SEQ ID NOS: 10912
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3638
; LENGTH: 442
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-867-701-3638
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Alignment Scores:  
Pred. No.: 4,39e-60 Length: 442  
Score: 565.00 Matches: 108  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 37.398 Indels: 0  
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-867-701-3638 (1-442)

QY 120 GYVAlAspTyrLysArgIleThrValLysValAspAlaProGlyrAsnLysIleAsnGln 139  
DB 442 GGTGGCGACTACAGCAAGCAATGCTGAAAGTCAATGCCCATACCAACAAATCAACAA 383  
QY 140 ArgIleLeuValValAspProValThrSerGlnHisGlnLeuThrCysGlnAlaGluGly 159  
DB 382 AGAATTTTGGTTGCTGATCCAGTCACTCTGACATCAATGATGATGATGATGATGATG 323  
QY 160 TyrProLysAlaGluValIleTyrPheSerSerAspHisGlnValLeuSerGlyLysThr 179  
DB 322 TACCCCAAGGCCCAAGTCACTGACACAGCAGTGCATCAAGTCTGAGTGAAGACC 263  
QY 180 ThrThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuArgIle 199  
DB 262 ACCACCAACCAATTCAGATC 203  
QY 200 AsnThrThrAsnGluIlePheTyrCysThrPheArgIleAspProGluGluAsn 219  
DB 202 AACACACCAACTATGATGATTTCTACTGCACTTTTAGGAGATGATGATGATGATGATG 143  
QY 220 HistHAlaGluLeuValIlePro 227  
DB 142 CATACAGCTGGAATTGGTCAATCCA 119

## RESULT 13

US-09-875-338-18  
; Sequence 18, Application US/09875338  
; Patent No. US20020095024A1  
; GENERAL INFORMATION:  
; APPLICANT: MIKESSELL, GLEN E.  
; APPLICANT: CHANG, HAN  
; APPLICANT: FINGER, JOSHUA N.  
; APPLICANT: YANG, GUCHEN  
; APPLICANT: LU, PIN  
; APPLICANT: ZHOU, XIA-DI  
; APPLICANT: PEACH, ROBERT  
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
; FILE REFERENCE: 3053-4071US2  
; CURRENT APPLICATION NUMBER: US/09/875,338  
; CURRENT FILING DATE: 2001-06-06  
; PRIOR APPLICATION NUMBER: 60/272,107  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: 60/209,811  
; PRIOR FILING DATE: 2000-06-06  
; NUMBER OF SEQ ID NOS: 94  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 18  
; LENGTH: 666  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-875-338-18

## Alignment Scores:

Pred. No.: 3.51e-55 Length: 666  
Score: 527.00 Matches: 101  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 34.888 Indels: 0  
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-875-338-18 (1-666)

QY 190 LeuPheAsnValThrSerThrLeuArgIleAsnThrThrAsnGluIlePheTyrCys 209  
DB 3 CTTTCATGTGTGACACGACATGAGATCAACACACCACTAATGATTTTCTACTGC 62  
QY 210 ThrPheArgIleAsnAspProGluGluAsnHisThrAlaGluLeuValIleProGluLeu 229  
DB 63 ACTTTTAGGAGATTAGATCTCTGAGAAACCATACACTAATTTGGTCAATCCAGAACTA 122  
QY 230 ProLeuAlaHisProProAsnGluArgThrHisLeuValIleLeuGlnValIleLeuLeu 249  
DB 123 CTTCTGGCACAATCTCCAAATGAAAGACTCACTTGGTAATTTCTGGAGCCATCTTATTA 182  
QY 250 CysLeuGlyValAlaLeuThrPheIlePheArgLeuArgLysGlyArgMetLeuAspVal 269  
DB 183 TGCCTTGCTGACACTGACATTCATCTCCGTTTAGAAAGGAGAGATGATGATGATG 242  
QY 270 LysLysCysGlyIleGlnAspThrAsnSerLysLysGlnSerAspThrHisLeuGluGly 289  
DB 243 AAAAAGTGGCATCCCAAGTACAAACTCAAGAAAGCAAGTGTATACATTTGGAGAG 302  
QY 290 Thr 290  
DB 303 ACG 305

## RESULT 14

US-09-896-913A-3  
; Sequence 3, Application US/09896913A  
; Patent No. US20020164600A1  
; GENERAL INFORMATION:  
; APPLICANT: Freeman, Gordon  
; APPLICANT: Chernova, Irene  
; APPLICANT: Chernova, Tatiana  
; APPLICANT: Malenkovich, Nelly  
; APPLICANT: WOOD, CLIVE  
; TITLE OF INVENTION: PD-L2 MOLECULES: NOVEL PD-1 LIGANDS AND  
; FILE REFERENCE: GNN-026A  
; CURRENT APPLICATION NUMBER: US/09/896,913A  
; CURRENT FILING DATE: 2002-04-15  
; PRIOR APPLICATION NUMBER: 60/214,563  
; PRIOR FILING DATE: 2000-06-28  
; PRIOR APPLICATION NUMBER: 60/270,822  
; PRIOR FILING DATE: 2001-02-23  
; PRIOR APPLICATION NUMBER: 60/271,114  
; PRIOR FILING DATE: 2001-02-23  
; NUMBER OF SEQ ID NOS: 12  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 3  
; LENGTH: 819  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (1)...(819)  
US-09-896-913A-3

## Alignment Scores:

Pred. No.: 5.82e-41 Length: 819  
Score: 411.50 Matches: 106  
Percent Similarity: 53.14% Conservative: 38  
Best Local Similarity: 39.11% Mismatches: 93  
Query Match: 27.23% Indels: 34  
DB: 9 Gaps: 8

US-09-649-108-1 (1-290) x US-09-896-913A-3 (1-819)

QY 19 PheThrValThrValPheLysAspLeuTyrValValGluIleGlySerAsnMetThrIle 38  
DB 61 TTCACAGTACAGTCCCTTAAGAACTGTATATAGACATGACACAGCAGTGCCTG 120  
QY 39 GluCysLysPheProValGluLysGlnLeuAspLeuAlaLeuIleValTyrTrpGlu 58  
DB 121 GAATGCAACTTTGACACTGGAAGTCATGTGACCTTGAGACCAATTAACAGCAGTTGCCA 180



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OM protein - protein search, using sw model

Run on: January 12, 2003, 10:10:43 ; Search time 10.5287 Seconds  
(without alignments)  
480.942 Million cell updates/sec

Title: US-09-649-108-1\_COPY\_30\_290  
Perfect score: 1356  
Sequence: 1 VEGSNMTICKFPVEKQD.....KCIQDPTNSKOSDTHLEET 261.

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 118974 seqs, 19401057 residues

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
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2: /cgn2\_6/ptodata/2/pubpaa/PCR\_NEW\_PUB.pep:\*  
3: /cgn2\_6/ptodata/2/pubpaa/US06\_NEW\_PUB.pep:\*  
4: /cgn2\_6/ptodata/2/pubpaa/US07\_PUBCOMB.pep:\*  
5: /cgn2\_6/ptodata/2/pubpaa/US07\_NEW\_PUB.pep:\*  
6: /cgn2\_6/ptodata/2/pubpaa/PCR\_PUBCOMB.pep:\*  
7: /cgn2\_6/ptodata/2/pubpaa/US08\_PUBCOMB.pep:\*  
8: /cgn2\_6/ptodata/2/pubpaa/US08\_NEW\_PUB.pep:\*  
9: /cgn2\_6/ptodata/2/pubpaa/US09\_PUBCOMB.pep:\*  
10: /cgn2\_6/ptodata/2/pubpaa/US10\_PUBCOMB.pep:\*  
11: /cgn2\_6/ptodata/2/pubpaa/US10\_NEW\_PUB.pep:\*  
12: /cgn2\_6/ptodata/2/pubpaa/US10\_PUBCOMB.pep:\*  
13: /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep:\*  
14: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1356	100.0	290	9	US-10-068-215-4
2	1356	100.0	290	9	US-09-896-738-12
3	1356	100.0	290	9	US-09-896-913A-12
4	1356	100.0	290	9	US-09-915-788A-17
5	1356	100.0	290	10	US-09-796-858-42
6	1356	100.0	290	10	US-09-875-338-2
7	1356	100.0	290	10	US-09-910-174A-8
8	1356	100.0	290	10	US-09-955-866-6
9	1356	100.0	290	10	US-09-895-837-12
10	1356	100.0	290	12	US-10-002-775-4
11	1104	81.4	220	9	US-09-915-789A-23
12	1096	80.8	480	10	US-09-875-338-5
13	1029	75.9	245	9	US-10-068-215-2
14	1029	75.9	245	12	US-10-002-775-2
15	952	70.2	290	9	US-10-068-215-23
16	952	70.2	290	9	US-09-896-913A-11
17	952	70.2	290	10	US-09-794-210-16
18	952	70.2	290	10	US-09-910-174A-32
19	952	70.2	290	10	US-09-895-837-11

20	952	70.2	290	12	US-10-002-775-11	Sequence 11, Appl
21	796.5	58.7	279	10	US-09-796-858-44	Sequence 44, Appl
22	352	26.0	254	10	US-09-955-866-3	Sequence 3, Appl
23	352	26.0	273	9	US-09-896-913A-2	Sequence 2, Appl
24	352	26.0	273	10	US-09-794-210-2	Sequence 2, Appl
25	352	26.0	273	10	US-09-875-338-15	Sequence 15, Appl
26	352	26.0	273	10	US-09-910-174A-2	Sequence 2, Appl
27	352	26.0	273	10	US-09-955-866-2	Sequence 2, Appl
28	352	26.0	273	10	US-09-895-837-2	Sequence 2, Appl
29	329	24.3	451	10	US-09-875-338-17	Sequence 17, Appl
30	301	22.2	247	9	US-09-896-913A-5	Sequence 5, Appl
31	301	22.2	247	10	US-09-796-858-48	Sequence 48, Appl
32	301	22.2	247	10	US-09-794-210-4	Sequence 4, Appl
33	301	22.2	247	10	US-09-910-174A-31	Sequence 31, Appl
34	301	22.2	247	10	US-09-895-837-5	Sequence 5, Appl
35	292	21.5	316	10	US-09-875-338-11	Sequence 11, Appl
36	292	21.5	316	10	US-09-875-338-7	Sequence 7, Appl
37	289.5	21.3	316	9	US-09-875-338-13	Sequence 13, Appl
38	289	21.3	316	9	US-09-978-295A-137	Sequence 137, Appl
39	289	21.3	316	9	US-09-896-738-14	Sequence 14, Appl
40	289	21.3	316	9	US-09-978-697-137	Sequence 137, Appl
41	289	21.3	316	9	US-09-978-192A-137	Sequence 137, Appl
42	289	21.3	316	9	US-09-999-832A-137	Sequence 137, Appl
43	289	21.3	316	9	US-09-790-622-4	Sequence 4, Appl
44	289	21.3	316	9	US-09-978-189-137	Sequence 137, Appl
45	289	21.3	316	10	US-09-789-561-135	Sequence 135, Appl

## ALIGNMENTS

RESULT 1	US-10-068-215-4	Sequence 4, Application US/10068215
1	Patent No. US2002016000A1	GENERAL INFORMATION:
2	APPLICANT: Clive Wood	APPLICANT: Gordon Freeman
3	TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses Therefor	FILE REFERENCE: GNN-004B
4	CURRENT APPLICATION NUMBER: US/10/068,215	CURRENT FILING DATE: 2002-02-06
5	PRIOR APPLICATION NUMBER: 09/645,069	PRIOR FILING DATE: 2000-08-23
6	PRIOR APPLICATION NUMBER: 60/150,390	PRIOR FILING DATE: 1999-8-23
7	PRIOR APPLICATION NUMBER: 60/164,897	PRIOR FILING DATE: 1999-11-10
8	NUMBER OF SEQ ID NOS: 23	SOFTWARE: PatentIn Ver. 2.0
9	SEQ ID NO 4	LENGTH: 290
10	TYPE: PRT	ORGANISM: Homo sapiens
11	US-10-068-215-4	Query Match
12	Best Local Similarity	100.0%; Score 1356; DB 9; Length 290;
13	Matches 261; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
14	1 VEGSNMTICKFPVEKQD...LAALIVYWEEDKNIIFVGEEDLKQVHSSYRORALLK 60	
15	30 VEGSNMTICKFPVEKQD...LAALIVYWEEDKNIIFVGEEDLKQVHSSYRORALLK 89	
16	61 DQSLGNAAQITVDKLDAGYRCMISYGCADYKRTIVYVAPYKINORILVDPVTS 120	
17	90 DQSLGNAAQITVDKLDAGYRCMISYGCADYKRTIVYVAPYKINORILVDPVTS 149	
18	121 EHELTQCAEGYPAEVIWTSDDHVLGSKTPTTNSKREELFNVTSTLRINTTNEIFYC 180	
19	150 EHELTQCAEGYPAEVIWTSDDHVLGSKTPTTNSKREELFNVTSTLRINTTNEIFYC 209	
20	181 TFRRLDPEENHTALVPEPLAHPNERRHLYILGAILLCLGVALTFFRLKGRMDV 240	

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Db      210 TFRRLDPEENHTLAVPELPLAHPNERHTLVILGAILLCLGVALTFIRLKRGRMDV 269
QY      241 KKGCIODTNSKKOSDTHLEET 261
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Db      270 KKGCIODTNSKKOSDTHLEET 290

RESULT 2
US-09-896-738-12
; Sequence 12, Application US/09896738
; Patent No. US20020165347A1
; GENERAL INFORMATION:
; APPLICANT: Fox, Michael
; APPLICANT: Sullivan, John K.
; APPLICANT: Fang, Mei
; TITLE OF INVENTION: B7-Like Molecules and Uses Thereof
; FILE REFERENCE: 00-513-A
; CURRENT APPLICATION NUMBER: US/09/896,738
; PARENT FILING DATE: 2001-06-29
; FOR APPLICATION NUMBER: 60/215,645
; PRIOR FILING DATE: 2000-06-30
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-896-738-12

Query Match      100.0%; Score 1356; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 VEGSNMTIECKRPVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRORARLLK 60
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Db      30 VEGSNMTIECKRPVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRORARLLK 89
QY      61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVYNAPYKINORILVDPVTS 120
        |||||||
Db      90 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVYNAPYKINORILVDPVTS 149
QY      121 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
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Db      150 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY      181 TFRRLDPEENHTLAVPELPLAHPNERHTLVILGAILLCLGVALTFIRLKRGRMDV 240
        |||||||
Db      210 TFRRLDPEENHTLAVPELPLAHPNERHTLVILGAILLCLGVALTFIRLKRGRMDV 269
QY      241 KKGCIODTNSKKOSDTHLEET 261
        |||||||
Db      270 KKGCIODTNSKKOSDTHLEET 290

RESULT 3
US-09-896-913A-12
; Sequence 12, Application US/09896913A
; Patent No. US20020164600A1
; GENERAL INFORMATION:
; APPLICANT: Freeman, Gordon
; APPLICANT: Chernova, Irene
; APPLICANT: Malenkovich, Nelly
; APPLICANT: Wood, Clive
; TITLE OF INVENTION: PD-12 MOLECULES: NOVEL PD-1 LIGANDS AND
; FILE REFERENCE: GNN-026A
; CURRENT APPLICATION NUMBER: US/09/896,913A
; PARENT FILING DATE: 2002-04-15
; PRIOR APPLICATION NUMBER: 60/214,563
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: 60/270,822
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; PRIOR FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 60/271,114
; PRIOR FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-896-913A-12

Query Match      100.0%; Score 1356; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 VEGSNMTIECKRPVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRORARLLK 60
        |||||||
Db      30 VEGSNMTIECKRPVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRORARLLK 89
QY      61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVYNAPYKINORILVDPVTS 120
        |||||||
Db      90 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVYNAPYKINORILVDPVTS 149
QY      121 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
        |||||||
Db      150 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY      181 TFRRLDPEENHTLAVPELPLAHPNERHTLVILGAILLCLGVALTFIRLKRGRMDV 240
        |||||||
Db      210 TFRRLDPEENHTLAVPELPLAHPNERHTLVILGAILLCLGVALTFIRLKRGRMDV 269
QY      241 KKGCIODTNSKKOSDTHLEET 261
        |||||||
Db      270 KKGCIODTNSKKOSDTHLEET 290

RESULT 4
US-09-915-789A-17
; Sequence 17, Application US/09915789A
; Patent No. US20020168762A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Lieping
; TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY
; FILE REFERENCE: 07039-219001
; CURRENT APPLICATION NUMBER: US/09/915,789A
; PARENT FILING DATE: 2002-06-04
; PRIOR APPLICATION NUMBER: US 60/220,991
; PRIOR FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-915-789A-17

Query Match      100.0%; Score 1356; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 VEGSNMTIECKRPVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRORARLLK 60
        |||||||
Db      30 VEGSNMTIECKRPVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRORARLLK 89
QY      61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVYNAPYKINORILVDPVTS 120
        |||||||
Db      90 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVYNAPYKINORILVDPVTS 149
QY      121 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
        |||||||
Db      150 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
```

QY 181 TFRRLDEENHTAELVPELPLAPPNERTHLVIGAILLCLGVALTFIFRLRGRMDV 240  
DB 210 TFRRLDEENHTAELVPELPLAPPNERTHLVIGAILLCLGVALTFIFRLRGRMDV 269  
QY 241 KKGCIODTNSKKOSDTHLEET 261  
DB 270 KKGCIODTNSKKOSDTHLEET 290

## RESULT 5

US-09-796-858-42  
Sequence 42, Application US/09796858  
Patent No. US2002005139A1  
GENERAL INFORMATION:  
APPLICANT: Holtmann, Douglas  
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC,  
FILE REFERENCE: 7853-226-999  
CURRENT FILING DATE: 2001-03-01  
PRIOR APPLICATION NUMBER: 09/223,094  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/223,546  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/224,246  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/312,359  
PRIOR FILING DATE: 1999-05-14  
PRIOR APPLICATION NUMBER: 09/336,536  
PRIOR FILING DATE: 1999-06-18  
PRIOR APPLICATION NUMBER: 09/342,687  
PRIOR FILING DATE: 1999-06-29  
PRIOR APPLICATION NUMBER: 09/399,723  
PRIOR FILING DATE: 1999-09-20  
PRIOR APPLICATION NUMBER: 09/471,179  
PRIOR FILING DATE: 1999-12-23  
PRIOR APPLICATION NUMBER: 09/474,071  
PRIOR FILING DATE: 1999-12-29  
PRIOR APPLICATION NUMBER: 09/474,072  
PRIOR FILING DATE: 1999-12-29  
PRIOR APPLICATION NUMBER: 09/572,002  
PRIOR FILING DATE: 2000-05-14  
PRIOR APPLICATION NUMBER: 09/597,993  
PRIOR FILING DATE: 2000-06-12  
PRIOR APPLICATION NUMBER: 09/599,596  
PRIOR FILING DATE: 2000-06-22  
PRIOR APPLICATION NUMBER: 09/606,565  
PRIOR FILING DATE: 2000-06-29  
PRIOR APPLICATION NUMBER: 09/365,164  
PRIOR FILING DATE: 1999-07-30  
PRIOR APPLICATION NUMBER: 09/630,334  
PRIOR FILING DATE: 2000-07-31  
PRIOR APPLICATION NUMBER: 09/665,666  
PRIOR FILING DATE: 2000-09-20  
NUMBER OF SEQ ID NOS: 50  
SEQ ID NO 42  
LENGTH: 290  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-796-858-42

Query Match 100.0%; Score 1356; DB 10; Length 290;  
Best Local Similarity 100.0%; Pred. No. 1e-94;  
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKFPVEKQDLAALIVYEMEDKNITIOFVHGEEDLKVOHSSYRORARLLK 60  
DB 30 VEGSNMTIECKFPVEKQDLAALIVYEMEDKNITIOFVHGEEDLKVOHSSYRORARLLK 89  
QY 61 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKNAPYKNINORILVVDPTS 120  
DB 90 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKNAPYKNINORILVVDPTS 149

QY 121 EHELTQAEQYKPAEVIWTSDDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
DB 150 EHELTQAEQYKPAEVIWTSDDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209  
QY 181 TFRRLDEENHTAELVPELPLAPPNERTHLVIGAILLCLGVALTFIFRLRGRMDV 240  
DB 210 TFRRLDEENHTAELVPELPLAPPNERTHLVIGAILLCLGVALTFIFRLRGRMDV 269  
QY 241 KKGCIODTNSKKOSDTHLEET 261  
DB 270 KKGCIODTNSKKOSDTHLEET 290

## RESULT 6

US-09-875-338-2  
Sequence 2, Application US/09875338  
Patent No. US20020095024A1  
GENERAL INFORMATION:  
APPLICANT: MIKESSELL, GLEN E.  
APPLICANT: CHANG, HAN  
APPLICANT: FINGER, JOSHUA N.  
APPLICANT: YANG, GUOCHEN  
APPLICANT: LU, PIN  
APPLICANT: ZHOU, XIA-DI  
APPLICANT: PEACH, ROBERT  
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
FILE REFERENCE: 3053-4071052  
CURRENT APPLICATION NUMBER: US/09/875,338  
CURRENT FILING DATE: 2001-06-06  
PRIOR APPLICATION NUMBER: 60/272,107  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/209,811  
PRIOR FILING DATE: 2000-06-06  
NUMBER OF SEQ ID NOS: 94  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 2  
LENGTH: 290  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-875-338-2

Query Match 100.0%; Score 1356; DB 10; Length 290;  
Best Local Similarity 100.0%; Pred. No. 1e-94;  
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKFPVEKQDLAALIVYEMEDKNITIOFVHGEEDLKVOHSSYRORARLLK 60  
DB 30 VEGSNMTIECKFPVEKQDLAALIVYEMEDKNITIOFVHGEEDLKVOHSSYRORARLLK 89  
QY 61 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKNAPYKNINORILVVDPTS 120  
DB 90 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKNAPYKNINORILVVDPTS 149  
QY 121 EHELTQAEQYKPAEVIWTSDDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
DB 150 EHELTQAEQYKPAEVIWTSDDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209  
QY 181 TFRRLDEENHTAELVPELPLAPPNERTHLVIGAILLCLGVALTFIFRLRGRMDV 240  
DB 210 TFRRLDEENHTAELVPELPLAPPNERTHLVIGAILLCLGVALTFIFRLRGRMDV 269  
QY 241 KKGCIODTNSKKOSDTHLEET 261  
DB 270 KKGCIODTNSKKOSDTHLEET 290

## RESULT 7

US-09-910-174A-8  
Sequence 8, Application US/09910174A  
Patent No. US20020106730A1  
GENERAL INFORMATION:  
APPLICANT: Coyle, Anthony J.

```

: APPLICANT: Fraser, Christopher C.
: TITLE OF INVENTION: B7-H2 Molecules, No. US20020106730A1 Members of the B7
: FILE OF INVENTION: Family and Uses Thereof
: FILE REFERENCE: 35800/236924
: CURRENT APPLICATION NUMBER: US/09/910,174A
: PRIOR FILING DATE: 2001-07-20
: PRIOR APPLICATION NUMBER: US 09/620,461
: PRIOR FILING DATE: 2000-07-20
: NUMBER OF SEQ ID NOS: 32
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 8
: LENGTH: 290
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-910-174A-8
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```

Query Match          100.0%; Score 1356; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```

QY 1 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 60
   |||||||
DB 30 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 89
   |||||||
QY 61 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKVNAIPYKINQRIILVDPVTS 120
   |||||||
DB 90 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKVNAIPYKINQRIILVDPVTS 149
   |||||||
QY 121 EHELTCAEGYKPAEVIWTSDDHVLGKTTTNSKREKLFNVTSLIRINTTNEIFYC 180
   |||||||
DB 150 EHELTCAEGYKPAEVIWTSDDHVLGKTTTNSKREKLFNVTSLIRINTTNEIFYC 209
   |||||||
QY 181 TFRRLDEENHTAEVLPELPPLAHPNERTHLVILGAILLCLGVALTFIFRLRGRMDV 240
   |||||||
DB 210 TFRRLDEENHTAEVLPELPPLAHPNERTHLVILGAILLCLGVALTFIFRLRGRMDV 269
   |||||||
QY 241 KCGIOTNSKKOSDTHLEET 261
   |||||||
DB 270 KCGIOTNSKKOSDTHLEET 290
   |||||||
```

```

RESULT 8
US-09-955-866-6
: Sequence 6, Application US/09955866
: Patent No. US20020107363A1
: GENERAL INFORMATION:
: APPLICANT: Sullivan, John K.
: APPLICANT: Holist, Paige
: APPLICANT: Yoshinaga, Steven Kiyoshi
: TITLE OF INVENTION: B7-Like Polypeptides and Uses Thereof
: FILE REFERENCE: 00/759-A
: CURRENT APPLICATION NUMBER: US/09/955,866
: PRIOR FILING DATE: 2001-09-19
: PRIOR APPLICATION NUMBER: 60/233,867
: NUMBER OF SEQ ID NOS: 30
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 6
: LENGTH: 290
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-955-866-6
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```

Query Match          100.0%; Score 1356; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 1 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 60
   |||||||
DB 30 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 89
   |||||||
```

```

QY 61 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKVNAIPYKINQRIILVDPVTS 120
   |||||||
DB 90 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKVNAIPYKINQRIILVDPVTS 149
   |||||||
QY 121 EHELTCAEGYKPAEVIWTSDDHVLGKTTTNSKREKLFNVTSLIRINTTNEIFYC 180
   |||||||
DB 150 EHELTCAEGYKPAEVIWTSDDHVLGKTTTNSKREKLFNVTSLIRINTTNEIFYC 209
   |||||||
QY 181 TFRRLDEENHTAEVLPELPPLAHPNERTHLVILGAILLCLGVALTFIFRLRGRMDV 240
   |||||||
DB 210 TFRRLDEENHTAEVLPELPPLAHPNERTHLVILGAILLCLGVALTFIFRLRGRMDV 269
   |||||||
QY 241 KCGIOTNSKKOSDTHLEET 261
   |||||||
DB 270 KCGIOTNSKKOSDTHLEET 290
   |||||||
```

```

RESULT 9
US-09-895-837-12
: Sequence 12, Application US/09895837
: Patent No. US20020110836A1
: GENERAL INFORMATION:
: APPLICANT: Freeman, Gordon
: APPLICANT: Chernova, Irene
: APPLICANT: Chernova, Tatyana
: APPLICANT: Malenkovich, Nelly
: APPLICANT: Wood, Clive
: APPLICANT: Latchman, Yvette
: APPLICANT: Sharpe, Arlene H.
: TITLE OF INVENTION: PD-12 MOLECULES: NOVEL PD-1 LIGANDS AND
: FILE OF INVENTION: USES THEREFOR
: FILE REFERENCE: GNN-026B
: CURRENT APPLICATION NUMBER: US/09/895,837
: PRIOR FILING DATE: 2001-06-28
: PRIOR APPLICATION NUMBER: 60/214,563
: PRIOR FILING DATE: 2000-06-28
: PRIOR APPLICATION NUMBER: 60/270,822
: PRIOR FILING DATE: 2001-02-23
: PRIOR APPLICATION NUMBER: 60/271,114
: NUMBER OF SEQ ID NOS: 12
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 12
: LENGTH: 290
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-895-837-12
```

```

Query Match          100.0%; Score 1356; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```

QY 1 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 60
   |||||||
DB 30 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 89
   |||||||
QY 61 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKVNAIPYKINQRIILVDPVTS 120
   |||||||
DB 90 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKVNAIPYKINQRIILVDPVTS 149
   |||||||
QY 121 EHELTCAEGYKPAEVIWTSDDHVLGKTTTNSKREKLFNVTSLIRINTTNEIFYC 180
   |||||||
DB 150 EHELTCAEGYKPAEVIWTSDDHVLGKTTTNSKREKLFNVTSLIRINTTNEIFYC 209
   |||||||
QY 181 TFRRLDEENHTAEVLPELPPLAHPNERTHLVILGAILLCLGVALTFIFRLRGRMDV 240
   |||||||
DB 210 TFRRLDEENHTAEVLPELPPLAHPNERTHLVILGAILLCLGVALTFIFRLRGRMDV 269
   |||||||
QY 241 KCGIOTNSKKOSDTHLEET 261
   |||||||
DB 270 KCGIOTNSKKOSDTHLEET 290
   |||||||
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RESULT 10  
US-10-002-775-4  
Sequence 4, Application US/10002775  
Patent No. US20020102651A1  
GENERAL INFORMATION:  
APPLICANT: Gordon Freeman  
APPLICANT: Vassiliki Boussiotis  
APPLICANT: Tatyana Chernova  
APPLICANT: Nelly Malenkovich  
TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR  
FILE REFERENCE: GNN-004ADV  
CURRENT APPLICATION NUMBER: US/10/002.775  
CURRENT FILING DATE: 2001-11-02  
PRIOR APPLICATION NUMBER: US 09/644,934  
PRIOR FILING DATE: 2000-08-23  
PRIOR APPLICATION NUMBER: 60/150,390  
PRIOR FILING DATE: 1999-08-23  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 4  
LENGTH: 290  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-002-775-4

Query Match 100.0%; Score 1356; DB 12; Length 290;  
Best Local Similarity 100.0%; Pred. No. 1e-94;  
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKFPVEKQDLALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLKLK 60  
DB 30 VEGSNMTIECKFPVEKQDLALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLKLK 89  
QY 61 DQSLGNAALQITDVKLODAGVYRCMISYGADYKRTIVKVNAPYNNINORILVDPVTS 120  
DB 90 DQSLGNAALQITDVKLODAGVYRCMISYGADYKRTIVKVNAPYNNINORILVDPVTS 149  
QY 121 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNTSTLRINTTNEIFYC 180  
DB 150 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNTSTLRINTTNEIFYC 209  
QY 181 TFRRLDPEENHTAEVLVPELPLAHPNERTHVLVILGAILLCLGVALFTFRLKGRMADV 240  
DB 210 TFRRLDPEENHTAEVLVPELPLAHPNERTHVLVILGAILLCLGVALFTFRLKGRMADV 269  
QY 241 KKGIDDTNSKKOSDPTLEET 261  
DB 270 KKGIDDTNSKKOSDPTLEET 290

RESULT 11  
US-09-915-789A-23  
Sequence 23, Application US/09915789A  
Patent No. US20020168762A1  
GENERAL INFORMATION:  
APPLICANT: Chen, Lieping  
APPLICANT: Tatyana Chernova  
TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY  
FILE REFERENCE: 07039-219001  
CURRENT APPLICATION NUMBER: US/09/915.789A  
CURRENT FILING DATE: 2002-06-04  
PRIOR APPLICATION NUMBER: US 60/220,991  
PRIOR FILING DATE: 2000-07-27  
NUMBER OF SEQ ID NOS: 23  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 23  
LENGTH: 220  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-915-789A-23

Query Match 81.4%; Score 1104; DB 9; Length 220;  
Best Local Similarity 100.0%; Pred. No. 5.4e-76;

Matches 211; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 VEGSNMTIECKFPVEKQDLALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLKLK 60  
DB 10 VEGSNMTIECKFPVEKQDLALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLKLK 69  
QY 61 DQSLGNAALQITDVKLODAGVYRCMISYGADYKRTIVKVNAPYNNINORILVDPVTS 120  
DB 70 DQSLGNAALQITDVKLODAGVYRCMISYGADYKRTIVKVNAPYNNINORILVDPVTS 129  
QY 121 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNTSTLRINTTNEIFYC 180  
DB 130 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNTSTLRINTTNEIFYC 189  
QY 181 TFRRLDPEENHTAEVLVPELPLAHPNERTH 211  
DB 190 TFRRLDPEENHTAEVLVPELPLAHPNERTH 220

RESULT 12  
US-09-875-338-5  
Sequence 5, Application US/09875338  
Patent No. US20020095024A1  
GENERAL INFORMATION:  
APPLICANT: MIKESSEL, GLEN E.  
APPLICANT: CHANG, HAN  
APPLICANT: FINGER, JOSHUA N.  
APPLICANT: YANG, GUCHEN  
APPLICANT: ZHOU, XIA-DI  
APPLICANT: PEACH, ROBERT  
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
FILE REFERENCE: 3053-4071US2  
CURRENT APPLICATION NUMBER: US/09/875.338  
CURRENT FILING DATE: 2001-06-06  
PRIOR APPLICATION NUMBER: 60/272,107  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/209,811  
PRIOR FILING DATE: 2000-06-06  
NUMBER OF SEQ ID NOS: 94  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 5  
LENGTH: 480  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-09-875-338-5

Query Match 80.8%; Score 1096; DB 10; Length 480;  
Best Local Similarity 100.0%; Pred. No. 5.4e-75;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKFPVEKQDLALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLKLK 60  
DB 34 VEGSNMTIECKFPVEKQDLALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLKLK 93  
QY 61 DQSLGNAALQITDVKLODAGVYRCMISYGADYKRTIVKVNAPYNNINORILVDPVTS 120  
DB 94 DQSLGNAALQITDVKLODAGVYRCMISYGADYKRTIVKVNAPYNNINORILVDPVTS 153  
QY 121 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNTSTLRINTTNEIFYC 180  
DB 154 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNTSTLRINTTNEIFYC 213  
QY 181 TFRRLDPEENHTAEVLVPELPLAHPNERT 210  
DB 214 TFRRLDPEENHTAEVLVPELPLAHPNERT 243

RESULT 13

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US-10-068-215-2
; Sequence 2, Application US/10068215
; Patent No. US2002016000A1
; GENERAL INFORMATION:
; APPLICANT: Clive Mood
; APPLICANT: Gordon Freeman
; TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses Therefor
; FILE REFERENCE: GNN-004B
; CURRENT APPLICATION NUMBER: US/10/068,215
; CURRENT FILING DATE: 2002-02-06
; PRIOR APPLICATION NUMBER: 09/645,069
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 60/150,390
; PRIOR FILING DATE: 1999-8-23
; PRIOR APPLICATION NUMBER: 60/164,897
; PRIOR FILING DATE: 1999-11-10
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-068-215-2

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GenCore version 5.1.3  
Copyright (c) 1993 - 2003 Comugen Ltd.

OM protein - protein search, using sw model

Run on: January 12, 2003, 10:10:43 ; Search time 8.47134 Seconds  
(without alignments)  
480.942 Million cell updates/sec

Title: US-09-649-108-10  
Perfect score: 1096  
Sequence: 1 VEGSNMTIECKPFVEKQOLD.....HTAEVLPELPLAHPNERT 210

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 118974 seqs, 19401057 residues

Number of hits satisfying chosen parameters: 118974

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Published\_Applications\_AA:\*  
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2: /cgn2\_6/ptodata/2/pubppa/PC01\_NEW\_PUB.pep:\*  
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4: /cgn2\_6/ptodata/2/pubppa/US07\_NEW\_PUB.pep:\*  
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11: /cgn2\_6/ptodata/2/pubppa/US10\_NEW\_PUB.pep:\*  
12: /cgn2\_6/ptodata/2/pubppa/US10\_PUBCOMB.pep:\*  
13: /cgn2\_6/ptodata/2/pubppa/US60\_NEW\_PUB.pep:\*  
14: /cgn2\_6/ptodata/2/pubppa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	1096	100.0	220	9	US-09-915-789A-23
2	1096	100.0	290	9	US-10-068-215-4
3	1096	100.0	290	9	US-09-896-738-12
4	1096	100.0	290	9	US-09-896-913A-12
5	1096	100.0	290	9	US-09-915-789A-17
6	1096	100.0	290	10	US-09-796-858-42
7	1096	100.0	290	10	US-09-875-338-2
8	1096	100.0	290	10	US-09-910-174A-8
9	1096	100.0	290	10	US-09-955-866-6
10	1096	100.0	290	12	US-09-895-837-12
11	1096	100.0	290	12	US-10-002-775-4
12	1096	100.0	480	10	US-09-875-338-5
13	1029	93.9	245	9	US-10-068-215-2
14	1029	93.9	245	12	US-10-002-775-2
15	815.5	74.4	290	9	US-10-068-215-23
16	815.5	74.4	290	9	US-09-896-913A-11
17	815.5	74.4	290	10	US-09-794-210-16
18	815.5	74.4	290	10	US-09-910-174A-32
19	815.5	74.4	290	10	US-09-895-837-11

20	815.5	74.4	290	12	US-10-002-775-11	Sequence 11, App1
21	697	63.6	279	10	US-09-796-858-44	Sequence 44, App1
22	336	30.7	254	10	US-09-955-866-3	Sequence 3, App1
23	336	30.7	273	9	US-09-896-913A-2	Sequence 2, App1
24	336	30.7	273	10	US-09-794-210-2	Sequence 2, App1
25	336	30.7	273	10	US-09-875-338-15	Sequence 15, App1
26	336	30.7	273	10	US-09-910-174A-2	Sequence 2, App1
27	336	30.7	273	10	US-09-955-866-2	Sequence 2, App1
28	336	30.7	273	10	US-09-895-837-2	Sequence 2, App1
29	329	30.0	451	10	US-09-875-338-17	Sequence 17, App1
30	289.5	26.4	247	9	US-09-896-913A-5	Sequence 5, App1
31	289.5	26.4	247	10	US-09-796-858-48	Sequence 48, App1
32	289.5	26.4	247	10	US-09-794-210-4	Sequence 4, App1
33	289.5	26.4	247	10	US-09-910-174A-31	Sequence 31, App1
34	289.5	26.4	247	10	US-09-895-837-5	Sequence 5, App1
35	265.5	24.2	316	10	US-09-875-338-11	Sequence 11, App1
36	265.5	24.2	698	10	US-09-875-338-7	Sequence 7, App1
37	265.5	24.2	698	10	US-09-875-338-9	Sequence 9, App1
38	262.5	24.0	316	9	US-09-978-295A-137	Sequence 137, App1
39	262.5	24.0	316	9	US-09-896-738-14	Sequence 14, App1
40	262.5	24.0	316	9	US-09-978-697-137	Sequence 137, App1
41	262.5	24.0	316	9	US-09-978-192A-137	Sequence 137, App1
42	262.5	24.0	316	9	US-09-999-832A-137	Sequence 137, App1
43	262.5	24.0	316	9	US-09-790-622-4	Sequence 4, App1
44	262.5	24.0	316	9	US-09-978-189-137	Sequence 137, App1
45	262.5	24.0	316	10	US-09-789-561-135	Sequence 135, App1

## ALIGNMENTS

RESULT 1  
US-09-915-789A-23  
Sequence 23, Application US/09915789A  
Patent No. US20020168762A1  
GENERAL INFORMATION:  
APPLICANT: Chen, Lieping  
TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY  
FILE REFERENCE: 07039-219001  
CURRENT APPLICATION NUMBER: US/09/915, 789A  
CURRENT FILING DATE: 2002-06-04  
PRIOR APPLICATION NUMBER: US 60/220,991  
PRIOR FILING DATE: 2000-07-27  
NUMBER OF SEQ ID NOS: 23  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 23  
LENGTH: 220  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-915-789A-23

Query Match 100.0%; Score 1096; DB 9; Length 220;  
Best Local Similarity 100.0%; Pred. No. 2, 2e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0;

QY 1 VEGSNMTIECKPFVEKQOLDLAALIVWEMEDKNIIQFVHGEEDLKVOHSSYRORARLLK 60  
DQ 10 VEGSNMTIECKPFVEKQOLDLAALIVWEMEDKNIIQFVHGEEDLKVOHSSYRORARLLK 69  
QY 61 DQLSGNALDITVKKLQDADAVYRCMISYGADVKRITVKNAPYKINQRLVYDPTS 120  
DQ 70 DQLSGNALDITVKKLQDADAVYRCMISYGADVKRITVKNAPYKINQRLVYDPTS 129  
QY 121 EHELTCAEGYPKAEVITWSSDHOVLGKTTTNSKREKLFNVYSTLRINTTNEIPLYC 180  
DQ 130 EHELTCAEGYPKAEVITWSSDHOVLGKTTTNSKREKLFNVYSTLRINTTNEIPLYC 189  
QY 181 TFRRLDPEENHTAEVLPELPLAHPNERT 210  
DQ 190 TFRRLDPEENHTAEVLPELPLAHPNERT 219

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RESULT 2
US-10-068-215-4
; Sequence 4, Application US/10068215
; Patent No. US2002016000A1
; GENERAL INFORMATION:
; APPLICANT: Clive Mood
; APPLICANT: Gordon Freeman
; TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses Therefor
; FILE REFERENCE: GNN-004B
; CURRENT APPLICATION NUMBER: US/10/068,215
; CURRENT FILING DATE: 2002-02-06
; PRIOR APPLICATION NUMBER: 09/645,069
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 60/150,390
; PRIOR FILING DATE: 1999-8-23
; PRIOR APPLICATION NUMBER: 60/164,897
; PRIOR FILING DATE: 1999-11-10
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; ID NO 4
; LENGTH: 290
; TYPE: PR
; ORGANISM: Homo sapiens
<US-10-068-215-4

Query Match          100.0%; Score 1096; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKFPVEKQDLALIIYWEKDNIIQFVHGEEDLKVQSSYRORARL 60
    |||
DB 30 VEGSNMTIECKFPVEKQDLALIIYWEKDNIIQFVHGEEDLKVQSSYRORARL 89
    |||
QY 61 DQSLGNAALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 120
    |||
DB 90 DQSLGNAALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 149
    |||
QY 121 EHELTQCAEGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
    |||
DB 150 EHELTQCAEGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
    |||
QY 181 TFRRLDPEENHTALVYIPELPLAHPNERT 210
    |||
DB 210 TFRRLDPEENHTALVYIPELPLAHPNERT 239
    |||

RESULT 3
US-09-896-738-12
; Sequence 12, Application US/09896738
; Patent No. US20020165347A1
; GENERAL INFORMATION:
; APPLICANT: Fox, Michael
; APPLICANT: Sullivan, John K.
; APPLICANT: Fang, Mei
; TITLE OF INVENTION: B7-Like Molecules and Uses Thereof
; FILE REFERENCE: 00-513-A
; CURRENT APPLICATION NUMBER: US/09/896,738
; CURRENT FILING DATE: 2001-06-29
; PRIOR APPLICATION NUMBER: 60/215,645
; PRIOR FILING DATE: 2000-06-30
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; ID NO 12
; LENGTH: 290
; TYPE: PR
; ORGANISM: Homo sapiens
US-09-896-738-12

Query Match          100.0%; Score 1096; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKFPVEKQDLALIIYWEKDNIIQFVHGEEDLKVQSSYRORARL 60
    |||
DB 30 VEGSNMTIECKFPVEKQDLALIIYWEKDNIIQFVHGEEDLKVQSSYRORARL 89
    |||
QY 61 DQSLGNAALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 120
    |||
DB 90 DQSLGNAALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 149
    |||
QY 121 EHELTQCAEGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
    |||
DB 150 EHELTQCAEGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
    |||
QY 181 TFRRLDPEENHTALVYIPELPLAHPNERT 210
    |||
DB 210 TFRRLDPEENHTALVYIPELPLAHPNERT 239
    |||
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DB 30 VEGSNMTIECKFPVEKQDLALIIYWEKDNIIQFVHGEEDLKVQSSYRORARL 89
    |||
QY 61 DQSLGNAALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 120
    |||
DB 90 DQSLGNAALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 149
    |||
QY 121 EHELTQCAEGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
    |||
DB 150 EHELTQCAEGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
    |||
QY 181 TFRRLDPEENHTALVYIPELPLAHPNERT 210
    |||
DB 210 TFRRLDPEENHTALVYIPELPLAHPNERT 239
    |||

RESULT 4
US-09-896-913A-12
; Sequence 12, Application US/09896913A
; Patent No. US20020164600A1
; GENERAL INFORMATION:
; APPLICANT: Freeman, Gordon
; APPLICANT: Chernova, Irene
; APPLICANT: Chernova, Tatyana
; APPLICANT: Malenkovich, Nelly
; APPLICANT: Wood, Clive
; TITLE OF INVENTION: PD-1 MOLECULES: NOVEL PD-1 LIGANDS AND
; FILE REFERENCE: GNN-026A
; CURRENT APPLICATION NUMBER: US/09/896,913A
; CURRENT FILING DATE: 2002-04-15
; PRIOR APPLICATION NUMBER: 60/214,563
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: 60/270,822
; PRIOR FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 60/271,114
; PRIOR FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; ID NO 12
; LENGTH: 290
; TYPE: PR
; ORGANISM: Homo sapiens
US-09-896-913A-12

Query Match          100.0%; Score 1096; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKFPVEKQDLALIIYWEKDNIIQFVHGEEDLKVQSSYRORARL 60
    |||
DB 30 VEGSNMTIECKFPVEKQDLALIIYWEKDNIIQFVHGEEDLKVQSSYRORARL 89
    |||
QY 61 DQSLGNAALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 120
    |||
DB 90 DQSLGNAALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 149
    |||
QY 121 EHELTQCAEGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
    |||
DB 150 EHELTQCAEGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
    |||
QY 181 TFRRLDPEENHTALVYIPELPLAHPNERT 210
    |||
DB 210 TFRRLDPEENHTALVYIPELPLAHPNERT 239
    |||

RESULT 5
US-09-915-789A-17
; Sequence 17, Application US/09915789A
; Patent No. US20020168762A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Lieping
; TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY
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;; TITLE OF INVENTION: MOLECULES  
;; FILE REFERENCE: 07039-219001  
;; CURRENT APPLICATION NUMBER: US/09/915,789A  
;; CURRENT FILING DATE: 2002-06-04  
;; PRIOR APPLICATION NUMBER: US 60/220,991  
;; PRIOR FILING DATE: 2000-07-27  
;; NUMBER OF SEQ ID NOS: 23  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 17  
;; LENGTH: 290  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-09-915-789A-17

Query Match 100.0%; Score 1096; DB 9; Length 290;  
Best Local Similarity 100.0%; Pred. No. 3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 VEGSNMTIECKPVEKQDLAALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLLK 60  
30 VEGSNMTIECKPVEKQDLAALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLLK 89  
QY 61 DQSLGNAALQITDVKRLQDAGVYRCMISYGADYKRITVKVNAFYKINORILVDPVTS 120  
90 DQSLGNAALQITDVKRLQDAGVYRCMISYGADYKRITVKVNAFYKINORILVDPVTS 149  
Db 121 EHELTCAEGYKPAEYVMTSSDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
150 EHELTCAEGYKPAEYVMTSSDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209  
QY 181 TFRRLDPEENHTALVLPPLAHPNERT 210  
Db 210 TFRRLDPEENHTALVLPPLAHPNERT 239

RESULT 6  
US-09-796-858-42

;; Sequence 42, Application US/09796858  
;; Patent No. US20020055139A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Holte mann, Douglas  
;; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC,  
;; FILE REFERENCE: 7853-326-999  
;; CURRENT APPLICATION NUMBER: US/09/796,858  
;; CURRENT FILING DATE: 2001-03-01  
;; PRIOR APPLICATION NUMBER: 09/223,094  
;; PRIOR FILING DATE: 1998-12-30  
;; PRIOR APPLICATION NUMBER: 09/223,546  
;; PRIOR FILING DATE: 1998-12-30  
;; PRIOR APPLICATION NUMBER: 09/224,246  
;; PRIOR FILING DATE: 1998-12-30  
;; PRIOR APPLICATION NUMBER: 09/312,359  
;; PRIOR FILING DATE: 1999-05-14  
;; PRIOR APPLICATION NUMBER: 09/336,536  
;; PRIOR FILING DATE: 1999-06-18  
;; PRIOR APPLICATION NUMBER: 09/342,687  
;; PRIOR FILING DATE: 1999-06-29  
;; PRIOR APPLICATION NUMBER: 09/399,723  
;; PRIOR FILING DATE: 1999-09-20  
;; PRIOR APPLICATION NUMBER: 09/471,179  
;; PRIOR FILING DATE: 1999-12-23  
;; PRIOR APPLICATION NUMBER: 09/474,071  
;; PRIOR FILING DATE: 1999-12-29  
;; PRIOR APPLICATION NUMBER: 09/474,072  
;; PRIOR FILING DATE: 1999-12-29  
;; PRIOR APPLICATION NUMBER: 09/572,002  
;; PRIOR FILING DATE: 2000-05-14  
;; PRIOR APPLICATION NUMBER: 09/597,993  
;; PRIOR FILING DATE: 2000-06-12  
;; PRIOR APPLICATION NUMBER: 09/599,596  
;; PRIOR FILING DATE: 2000-06-22  
;; PRIOR APPLICATION NUMBER: 09/606,565

;; PRIOR FILING DATE: 2000-06-29  
;; PRIOR APPLICATION NUMBER: 09/365,164  
;; PRIOR FILING DATE: 1999-07-30  
;; PRIOR APPLICATION NUMBER: 09/630,334  
;; PRIOR FILING DATE: 2000-07-31  
;; PRIOR APPLICATION NUMBER: 09/665,666  
;; PRIOR FILING DATE: 2000-09-20  
;; NUMBER OF SEQ ID NOS: 50  
;; SEQ ID NO 42  
;; LENGTH: 290  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-09-796-858-42

Query Match 100.0%; Score 1096; DB 10; Length 290;  
Best Local Similarity 100.0%; Pred. No. 3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 VEGSNMTIECKPVEKQDLAALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLLK 60  
30 VEGSNMTIECKPVEKQDLAALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLLK 89  
QY 61 DQSLGNAALQITDVKRLQDAGVYRCMISYGADYKRITVKVNAFYKINORILVDPVTS 120  
90 DQSLGNAALQITDVKRLQDAGVYRCMISYGADYKRITVKVNAFYKINORILVDPVTS 149  
Db 121 EHELTCAEGYKPAEYVMTSSDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
150 EHELTCAEGYKPAEYVMTSSDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209  
QY 181 TFRRLDPEENHTALVLPPLAHPNERT 210  
Db 210 TFRRLDPEENHTALVLPPLAHPNERT 239

RESULT 7  
US-09-875-338-2

;; Sequence 2, Application US/09875338  
;; Patent No. US20020095024A1  
;; GENERAL INFORMATION:  
;; APPLICANT: MIKESSELL, GLEN E.  
;; APPLICANT: CHANG, HAN  
;; APPLICANT: FINGER, JOSHUA N.  
;; APPLICANT: YANG, GUCHEN  
;; APPLICANT: LU, PIN  
;; APPLICANT: ZHOU, XIA-DI  
;; APPLICANT: PEACH, ROBERT  
;; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
;; FILE REFERENCE: 3053-4071US2  
;; CURRENT APPLICATION NUMBER: US/09/875,338  
;; CURRENT FILING DATE: 2001-06-06  
;; PRIOR APPLICATION NUMBER: 60/272,107  
;; PRIOR FILING DATE: 2001-02-28  
;; PRIOR APPLICATION NUMBER: 60/209,811  
;; PRIOR FILING DATE: 2000-06-06  
;; NUMBER OF SEQ ID NOS: 94  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 2  
;; LENGTH: 290  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-09-875-338-2

Query Match 100.0%; Score 1096; DB 10; Length 290;  
Best Local Similarity 100.0%; Pred. No. 3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 VEGSNMTIECKPVEKQDLAALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLLK 60  
30 VEGSNMTIECKPVEKQDLAALIVYWEDEKNIIOFVHGEEDLKVOHSSYRORARLLK 89  
Db 61 DQSLGNAALQITDVKRLQDAGVYRCMISYGADYKRITVKVNAFYKINORILVDPVTS 120

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|||||
Db 90 DQSLGNAALQITDVKIQDAGVYRCMISYGADYKRTIVKNAFYKINQRIILVVDPTS 149
QY 121 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY 181 TFRRLDPEENHTALVIPLELPAHPNERT 210
Db 210 TFRRLDPEENHTALVIPLELPAHPNERT 239
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## RESULT 8

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US-09-910-174A-8
; Sequence 8, Application US/09910174A
; Patent No. US20020106730A1
; GENERAL INFORMATION:
; APPLICANT: Coyne, Anthony J.
; APPLICANT: Fraser, Christopher C.
; APPLICANT: Manning, Stephen
; TITLE OF INVENTION: B7-H2 Molecules, No. US20020106730A1 Members of the B7
; FILE REFERENCE: 35800/236924
; CURRENT APPLICATION NUMBER: US/09/910,174A
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: US 09/620,461
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-910-174A-8
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Query Match 100.0%; Score 1096; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 VEGSNMTIECKFPVEKOLDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARLLK 60
Db 30 VEGSNMTIECKFPVEKOLDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARLLK 89
QY 61 DQSLGNAALQITDVKIQDAGVYRCMISYGADYKRTIVKNAFYKINQRIILVVDPTS 120
Db 90 DQSLGNAALQITDVKIQDAGVYRCMISYGADYKRTIVKNAFYKINQRIILVVDPTS 149
QY 121 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY 181 TFRRLDPEENHTALVIPLELPAHPNERT 210
Db 210 TFRRLDPEENHTALVIPLELPAHPNERT 239
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## RESULT 9

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US-09-955-866-6
; Sequence 6, Application US/09955866
; Patent No. US20020107363A1
; GENERAL INFORMATION:
; APPLICANT: Fox, Michael
; APPLICANT: Sullivan, John K.
; APPLICANT: Holst, Paige
; APPLICANT: Yoshinaga, Steven Kiyoshi
; TITLE OF INVENTION: B7-Like Polypeptides and Uses Thereof
; FILE REFERENCE: 00/759-A
; CURRENT APPLICATION NUMBER: US/09/955,866
; PRIOR FILING DATE: 2001-09-19
; PRIOR APPLICATION NUMBER: 60/233,867
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: PatentIn Ver. 2.0
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; SEQ ID NO 6
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-955-866-6
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Query Match 100.0%; Score 1096; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 VEGSNMTIECKFPVEKOLDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARLLK 60
Db 30 VEGSNMTIECKFPVEKOLDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARLLK 89
QY 61 DQSLGNAALQITDVKIQDAGVYRCMISYGADYKRTIVKNAFYKINQRIILVVDPTS 120
Db 90 DQSLGNAALQITDVKIQDAGVYRCMISYGADYKRTIVKNAFYKINQRIILVVDPTS 149
QY 121 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY 181 TFRRLDPEENHTALVIPLELPAHPNERT 210
Db 210 TFRRLDPEENHTALVIPLELPAHPNERT 239
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## RESULT 10

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US-09-895-837-12
; Sequence 12, Application US/09895837
; Patent No. US20020110836A1
; GENERAL INFORMATION:
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; APPLICANT: Freeman, Gordon
; APPLICANT: Chernova, Tatyana
; APPLICANT: Malenkovich, Nelly
; APPLICANT: Wood, Clive
; APPLICANT: Latchman, Yvette
; APPLICANT: Sharpe, Arlene H.
; TITLE OF INVENTION: PD-12 MOLECULES: NOVEL PD-1 LIGANDS AND
; FILE REFERENCE: GNN-026B
; CURRENT APPLICATION NUMBER: US/09/895,837
; PRIOR FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: 60/214,563
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: 60/270,822
; PRIOR FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 60/271,114
; PRIOR FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-895-837-12
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Query Match 100.0%; Score 1096; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 VEGSNMTIECKFPVEKOLDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARLLK 60
Db 30 VEGSNMTIECKFPVEKOLDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARLLK 89
QY 61 DQSLGNAALQITDVKIQDAGVYRCMISYGADYKRTIVKNAFYKINQRIILVVDPTS 120
Db 90 DQSLGNAALQITDVKIQDAGVYRCMISYGADYKRTIVKNAFYKINQRIILVVDPTS 149
QY 121 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 209
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QY 181 TFRRLDPENHTAELVPELPLAHPNERT 210  
DB 210 TFRRLDPENHTAELVPELPLAHPNERT 239

## RESULT 11

US-10-002-775-4  
Sequence 4, Application US/10002775  
Patent No. US20020102651A1  
GENERAL INFORMATION:  
APPLICANT: Gordon Freeman  
APPLICANT: Vassiliki Bousiotis  
APPLICANT: Tatyana Chernova  
APPLICANT: Nelly Malenkovich  
TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR  
FILE REFERENCE: GNN-004ADV  
CURRENT APPLICATION NUMBER: US/10/002,775  
CURRENT FILING DATE: 2001-11-02  
PRIOR APPLICATION NUMBER: US 09/644,934  
PRIOR FILING DATE: 2000-08-23  
PRIOR APPLICATION NUMBER: 60/150,390  
PRIOR FILING DATE: 1999-08-23  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 4  
LENGTH: 290  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-002-775-4

Query Match 100.0%; Score 1096; DB 12; Length 290;  
Best Local Similarity 100.0%; Pred. No. 3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 60  
DB 30 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 89  
QY 61 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 120  
DB 90 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 149  
QY 121 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
DB 150 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209  
QY 181 TFRRLDPENHTAELVPELPLAHPNERT 210  
DB 210 TFRRLDPENHTAELVPELPLAHPNERT 239

## RESULT 12

US-09-875-338-5  
Sequence 5, Application US/09875338  
Patent No. US20020095024A1  
GENERAL INFORMATION:  
APPLICANT: MIKESEIL, GLEN E.  
APPLICANT: CHANG, HAN  
APPLICANT: FINGER, JOSHUA N.  
APPLICANT: YANG, GUCHEN  
APPLICANT: LU, PIN  
APPLICANT: ZHOU, XIA-DI  
APPLICANT: PEACH, ROBERT  
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
FILE REFERENCE: 3053-407IUS2  
CURRENT APPLICATION NUMBER: US/09/875,338  
CURRENT FILING DATE: 2001-06-06  
PRIOR APPLICATION NUMBER: 60/272,107  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/209,811  
PRIOR FILING DATE: 2000-06-06

NUMBER OF SEQ ID NOS: 94  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 5  
LENGTH: 480  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
OTHER INFORMATION: fusion construct  
US-09-875-338-5

Query Match 100.0%; Score 1096; DB 10; Length 480;  
Best Local Similarity 100.0%; Pred. No. 5.3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 60  
DB 34 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 93  
QY 61 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 120  
DB 94 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 153  
QY 121 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
DB 154 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 213  
QY 181 TFRRLDPENHTAELVPELPLAHPNERT 210  
DB 214 TFRRLDPENHTAELVPELPLAHPNERT 243

## RESULT 13

US-10-068-215-2  
Sequence 2, Application US/10068215  
Patent No. US20020160000A1  
GENERAL INFORMATION:  
APPLICANT: Clive Mood  
APPLICANT: Gordon Freeman  
TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses Therefor  
FILE REFERENCE: GNN-004B  
CURRENT APPLICATION NUMBER: US/10/068,215  
CURRENT FILING DATE: 2002-02-06  
PRIOR APPLICATION NUMBER: 09/645,069  
PRIOR FILING DATE: 2000-08-23  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: 60/150,390  
PRIOR FILING DATE: 1999-11-10  
PRIOR APPLICATION NUMBER: 60/164,897  
NUMBER OF SEQ ID NOS: 23  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2  
LENGTH: 245  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-068-215-2

Query Match 93.9%; Score 1029; DB 9; Length 245;  
Best Local Similarity 100.0%; Pred. No. 1.9e-68;  
Matches 198; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 60  
DB 30 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 89  
QY 61 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 120  
DB 90 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 149  
QY 121 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
DB 150 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209

Qy 181 TFRRLDPEENHTAELVIP 198  
Db 210 TFRRLDPEENHTAELVIP 227

RESULT 14  
US-10-002-775-2

Sequence 2, Application US/10002775  
Patent No. US20020102651A1  
GENERAL INFORMATION:  
APPLICANT: Gordon Freeman  
APPLICANT: Vassiliki Boussiottis  
APPLICANT: Tatyana Chernova  
APPLICANT: Nelly Malenkovich  
TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR  
FILE REFERENCE: GNN-004ADY  
CURRENT APPLICATION NUMBER: US/10/002,775  
CURRENT FILING DATE: 2001-11-02  
PRIOR APPLICATION NUMBER: US 09/644,934  
FOR FILING DATE: 2000-08-23  
FOR APPLICATION NUMBER: 60/150,390  
FOR FILING DATE: 1999-08-23  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2  
LENGTH: 245  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-002-775-2

Query Match 93.9%; Score 1029; DB 12; Length 245;  
Best Local Similarity 100.0%; Pred. No. 1.9e-68;  
Matches 198; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VEYGSNMTIECKFPVEKQDLALIVYEMEDKNITQFVHGEEEDLKVOHSSYRORARLTK 60  
Db 30 VEYGSNMTIECKFPVEKQDLALIVYEMEDKNITQFVHGEEEDLKVOHSSYRORARLTK 89  
Qy 61 DQLSGNAALQITDVKLODAGYRCMISYGADYKRITVKVNAAPYKINORILVVDPTS 120  
Db 90 DQLSGNAALQITDVKLODAGYRCMISYGADYKRITVKVNAAPYKINORILVVDPTS 149  
Qy 121 EHELTCOAEQYKAEVITWSSDHOVLGSGTITTSKREKLEFNVTSLRINTTNEIFYC 180  
Db 150 EHELTCOAEQYKAEVITWSSDHOVLGSGTITTSKREKLEFNVTSLRINTTNEIFYC 209  
Qy 181 TFRRLDPEENHTAELVIP 198  
Db 210 TFRRLDPEENHTAELVIP 227

RESULT 15  
US-10-068-215-23

Sequence 23, Application US/10068215  
Patent No. US20020160000A1  
GENERAL INFORMATION:  
APPLICANT: Clive Wood  
APPLICANT: Gordon Freeman  
TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses therefor  
FILE REFERENCE: GNN-004B  
CURRENT APPLICATION NUMBER: US/10/068,215  
CURRENT FILING DATE: 2002-02-06  
PRIOR APPLICATION NUMBER: 09/645,069  
PRIOR FILING DATE: 2000-08-23  
PRIOR APPLICATION NUMBER: 60/150,390  
PRIOR FILING DATE: 1999-8-23  
PRIOR APPLICATION NUMBER: 60/164,897  
PRIOR FILING DATE: 1999-11-10  
NUMBER OF SEQ ID NOS: 23  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 23  
LENGTH: 290  
TYPE: PRT

ORGANISM: Mus musculus  
US-10-068-215-23

Query Match 74.4%; Score 815.5; DB 9; Length 290;  
Best Local Similarity 72.9%; Pred. No. 8.4e-53;  
Matches 153; Conservative 23; Mismatches 33; Indels 1; Gaps 1;

Qy 1 VEYGSNMTIECKFPVEKQDLALIVYEMEDKNITQFVHGEEEDLKVOHSSYRORARLTK 60  
Db 30 VEYGSNMTIECKFPVEKQDLALIVYEMEDKNITQFVHGEEEDLKVOHSSYRORARLTK 89  
Qy 61 DQLSGNAALQITDVKLODAGYRCMISYGADYKRITVKVNAAPYKINORILVVDPTS 120  
Db 90 DQLSGNAALQITDVKLODAGYRCMISYGADYKRITVKVNAAPYKINORILVVDPTS 148  
Qy 121 EHELTCOAEQYKAEVITWSSDHOVLGSGTITTSKREKLEFNVTSLRINTTNEIFYC 180  
Db 149 EHELTCOAEQYKAEVITWSSDHOVLGSGTITTSKREKLEFNVTSLRINTTNEIFYC 208  
Qy 181 TFRRLDPEENHTAELVIP 198  
Db 209 TFRRLDPEENHTAELVIP 238

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